

Volume

#

R0369

369

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BOOK A-352

FIELD NOTES

OF THE SURVEY OF THE

Of the _____ Meridian,

The State of _____

EXECUTED BY

in the capacity of U. S. Surveyor _____ under instructions dated _____, 191____,

issued by the United States Surveyor General to govern surveys included in

Map No. _____, which were approved by the Commissioner of the General Land

Office _____, 191____, pursuant to authority contained in the Act of

Congress dated _____, 191____

Survey commenced _____, 191____

Survey completed _____, 191____

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BOOK A-369

C.

FILED

DEC 30 1910

WJH

FIELD NOTES

OF THE SURVEY OF THE

RE Survey and retracement of the Fourth Standard

Parallel South Through Range 8 East

Of the Salt Lake Base and Meridian,

U T A H,

AS SURVEYED BY

Howard W. Miller and Andrew Nelson, United States Deputy Surveyors,

under their Contract No. 316, dated January 15, 1910

Survey commenced June 1, 1910, 190

Survey completed June 2, 1910, 190

Res. 5-03-25

Rev. 79-80

NAMES AND DUTIES OF ASSISTANTS.

Howard W. Miles	chairman
Fred Wright	"
Ray Bryan	moderator
Edward Jones	assn
Edward Jones	flagman

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INDEX DIAGRAM.

Township _____, Range _____

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7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
5	4	3	2	2	1

Meanders Page _____
4th Standard Parallel Range 8 East

PRELIMINARY OATHS OF ASSISTANTS.

Howard W. Miller and Fred Wright

do solemnly swear that we will well and faithfully execute the duties of chainmen that we will level the chain upon even and uneven ground, and place the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

and Retracement of the 11th Standard Parallel South Range 3 East of the S.L.B. & N. Utah.

Howard W. Miller Chainman

Fred Wright Chainman

Subscribed and sworn to before me this 1 day of June 1910



Andrew Nelson
U.S. Deputy Surveyor

Ray Bryan and -

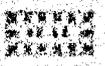
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

Retracement of the 11th Standard Parallel South Range 3 East of the S.L.B. & N. Utah.

Ray Bryan Moundman

Moundman

Subscribed and sworn to before me this 1 day of June 1910



Andrew Nelson
U.S. Deputy Surveyor

Edward Jones and -

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Retracement of the 11th Standard Parallel South Range 3 East of the S.L.B. & N. Utah.

Edward Jones Axman

Axman

Subscribed and sworn to before me this 1 day of June 1910



Andrew Nelson
U.S. Deputy Surveyor

Edward Jones

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

Retracement of the 11th Standard Parallel South Range 3 East of the S.L.B. & N. Utah.

Edward Jones Flagman

Subscribed and sworn to before me this 1 day of June 1910



Andrew Nelson
U.S. Deputy Surveyor

Retracement and Resurvey of the fourth Standard Paralell South, R. 8' E.

- chains Survey commenced June 1, 1910. and executed with a W. & L. E. Gurley light mountain transit. For description see book "A" of this survey.
- I know the transit to be in adjustment by observations made on Polaris May 19 and May 28,
- I begin at the Standard cor. of T 20 S.; Rs 8 and 9 E. which is a sandstone 14 / 12 / 8 ins., marked as described by the surveyor general.
- June 1: At 7 h. 58 m. a.m.l.m.t. I set off $39^{\circ} 01\frac{1}{2}'$ on the lat. arc; $22^{\circ} 00\frac{1}{2}'$ N. on the decl. arc; and determine a true meridian with the solar at the standard Tp. cor.
- Thence I run
- West, retracing on the S. bdy sec. 36.
- 39.96 Fall 91ks N. of the $\frac{1}{4}$ sec. cor. which is a sandstone 18 / 12 / 4 ins. marked as described by the surveyor general.
- The true bearing of this line is $S 89^{\circ} 52' W.$, and the dist, is 39.96 chs.
- From the $\frac{1}{4}$ sec. cor I continue, West
- 40.27 Fall 17 lks. S. of the standard cor. of secs. 35 and 36 which is a sandstone 24 / 15 / 5 ins., marked as described by the surveyor general.
- The marks on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows;
- Set an iron post, 3 ft. long, 3ins. in dia., 24ins. in a mound of earth and stone, for standard cor of sec. 35 and 36, marked on brass cap
- T 20 S R 8 E in N. half,
- S 36' in NE. and
- S 35 in NW. quadrant, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
- The true bearing of this line is $N 89^{\circ} 45' W.$, and the dist. is 40.27 chs.

chains
 40.32 West, retracing on the S. bdy sec. 35
 Fall 7 lks. S. of the $\frac{1}{4}$ sec. cor. which is a sandstone
 24 / 10 / 5 ins. marked as described by the surveyor
 general.
 The true bearing of this line is N. $89^{\circ} 54'$ W., and the
 dist. is 40.32 chs.

From the $\frac{1}{4}$ sec. cor. I continue
 West

40.31 Fall 8 lks. S. of the standard cor. of secs. 34 and 35
 which is a sandstone 26 / 13 / 6 ins., marked as describ-
 ed by the surveyor general. The marks on this stone are
 nearly obliterated, I destroy all traces of the old cor.
 and reestablish it at the same point as follows;
 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins.
 the ground, for standard cor of secs. 34 and 25, marked
 on brass cap

T 20 S R 8 E in N. half,

S 35 in NE. and

S 34 in NW. quadrant; raise a mound of stone, 2 ft.
 base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

The true bearing of this line is N $89^{\circ} 53'$ W., and the
 dist. is 40.31 chs.

June 1; At this sec. cor I set off $22^{\circ} 01\frac{1}{2}'$ N. on the
 decl. arc; and at 11 h. 57 m. ^{am} 1.m.t. observe the sun on
 the meridian; the resulting lat. is $39^{\circ} 01\frac{1}{2}'$

West, retracing on the S. bdy. sec. 34

0.47 Fall 12 lks S. of the standard $\frac{1}{4}$ sec. cor which is a
 sandstone 15 / 17 / 5 ins., marked as described by the
 surveyor general.

The true bearing of this line is N $89^{\circ} 50'$ W., and the
 dist. is 40.47 chs.

From the $\frac{1}{4}$ sec. cor I continue

West

0.17 Fall 5 lks. N. of the standard cor of secs. 33 and 34

Retracment and Resurvey of the Fourth Standard Paralell South, R 8 E.

chains which is a sandstone $34 / .10 / 9$ ins. marked and witnessed as described by the surveyor general. The marks on this stone are nearly obliterated, I destroy all traces of the old sec. cor. and reestablish it at the same point as follows;

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor of secs. 33 and 34 marked on brass cap

T 20 S R 8 E in N. half,

S 34 in NE. and

S 33 in NW. quadrant; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.

The true bearing of this line is S $89^{\circ} 56'$ W., and the dist. is 40.17 chs.

West, retracing on the S. bdy of sec. 33

40.45 Fall 22 lks S. of the standard $\frac{1}{4}$ sec. cor which is a sandstone $10 / 7 / 4$ ins, marked and witnessed as described by the surveyor general.

The true bearing of this line is N $89^{\circ} 41'$ W., and the dist. is 40.45 chs.

June 1, 1910.

June 2 ; At 6 h. 58 m. a. m. 1 m. t. I set off $39^{\circ} 01\frac{1}{2}'$ N. on the lat. arc; $22^{\circ} 08\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the standard $\frac{1}{4}$ sec. cor in the S. bdy. sec. 33

Thence I run

West, retracing on the S. bdy sec 33

40.45 Fall 22 lks S. of the standard cor of secs. 32 and 33 which is a sandstone $14 / 14 / 7$ ins. marked and witnessed as described by the surveyor general. The marks on this stone are nearly obliterated. I destroy all traces of the old cor and reestablish it at the same point as follows:

acement and Resurvey Fourth standard Paralell South, Range 8 East.

chains

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 32 and 33 marked on brass cap

T 20 S R 8 E in N. half,

S 33 in NE. and

S 32 in NW. quadrant; dig pits 24 / 18 / 12 ins., crosswise on each line, E. and W., 3 ft., and N. of post 7 ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high, N. of cor.

The true bearing of this line is N 89° 41' W., and the dist. is 40.45 chs.

West, retracing on the S. bdy of sec. 32

40.35 Fall 168 lks. N. of the standard 1/4 sec. cor. which is a sandstone 16 / 16 / 5 ins. marked and witnessed as described by the surveyor general.

The true bearing of this line is S 87° 37' W., and the dist. is 40.39 chs.

From the 1/4 sec. cor. I continue

West.

40.43 Fall 155 lks N. of the standard cor of secs. 31 and 32 which is a sandstone 22 / 19 / 2 ins. marked and witnessed as described by the surveyor general. The marks on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor of secs. 31 and 32 marked on brass cap

T 20 S R 8 E in N. half,

S 32 in NE. and

S 31 in NW. quadrant; from which

A cedar, 8 ins. diam., bears N 26 1/2° E., 85 1/2 lks.

dist., marked T 20 S R 8 E S 32 B T

and raise a mound of stone 2 ft. base, 1 1/2 ft. high N.

Boundries of T. 21 S., R 8 E.

Latitudes, departures, and closing errors.

Lines designated	True bearing	Dist.	Latitudes				Departures.			
			N.	S.	E.	W				
			-----				-----			
			chs.	chs.	chs.	chs.	chs.	chs.	chs.	
4th Stan. Par.										
S. bdy. sec. 36	S 89°52'W.	39.96	.07	30.09					39.96	
" "	" N 89°45'W.	40.27	.17						40.27	
S. bdy. sec. 35	N 89°54' W.	40.32	07						40.32	
" "	" N 89°53'W.	40.31	08						40.31	
S " "	34 N 89°50'W.	40.47	12						40.47	
" "	" S 89°56'W.	40.17		.05					40.17	
S " "	33 N 89°41'W.	80.90	44						80.90	
S " "	32 S 87°37'W.	40.39		1.68					40.35	
" "	" S 87°48' W.	40.46		1.55					40.43	
S bdy sec 31	S 85°51'W.	79.80		5.77					79.59	
W. BDY. of TP.										
W. bdy sec 6	S 0° 09'E.	80.88		80.88			.0121			
S. 5 mi.	South	412.93		412.93						
S. bdy of tp.	East	477.67					477.67			
E. bdy of tp	North	501.93	501.93				5.51			
Convergency									.59	
Totals			502.81	502.95	483.39	483.36				
Errors				0.14		0.03				

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W. Miller

Andrew Nelson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of ^{re-} and Retracement of the 4th Standard Parallel South R. 8 East of the S.L.B. & M. Utah, showing the respective capacities in which they acted:

- Howard W. Miller Chainman.
- Fred Wright Chainman.
- Ray Bryan Moundman.
- Moundman.
- Edward Jones Axman.
- Axman.
- Edward Jones Flagman.

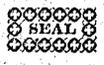
FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W. Miller and Andrew Nelson, United States Deputy Surveyor ^{re + Retracing} in surveying all those parts or portions of the 4th Standard Parallel South thru Range 8 East

of the Salt Lake Base & meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for U t a h.

- Howard W. Miller Chainman.
- Fred Wright Chainman.
- Moundman.
- Ray Bryan Moundman.
- Edward Jones Axman.
- Axman.
- Edward Jones Flagman.

described and sworn to before me this 2 day of June, 1900



Andrew Nelson
U. S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew Nelson, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the resurvey and retracement of the Fourth Standard Parallel South, through Range 8 East

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Andrew Nelson
United States Deputy Surveyor.

Subscribed by said Andrew Nelson, and sworn to before me, this 30 day of December, 1910.

Thomas Hull
U.S. Surveyor-General



U.S. Surveyor-General for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1911.

The foregoing field notes of the survey of the resurvey and retracement of the Fourth Standard Parallel South, through Range 8 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller and Andrew Nelson under his contract No. 316, dated January 15, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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Page

U.S.G.
M.S.B.

FILED
DEC 30 1910

M.S.B.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

U.S.G.

FIELD NOTES

OF THE SURVEY OF THE

East and the South Boundaries of

T. 21 S., R. 8 E.

Of the Salt Lake Base and Meridian,

U. T. A. H.

AS SURVEYED BY

Howard W. Miller and Andrew Nelson, United States Deputy Surveyors

Under his Contract No. 316, dated January 15, 1900

Survey commenced June 3, 1900

Survey completed June 5, 1900

5. Bdy 5-77-67
E. Bdy 6-21-93 - closing 55! ✓

19-60

NAMES AND DUTIES OF ASSISTANTS.

Howard W. Miller, Chairman

Fred Wright, Chairman

Ray Byron, member

Edward Jones, act man

Edward Jones, flag man

BOOK A-369

INDEX DIAGRAM.

Township 21 South, Range 8 East

6	5	4	3	2	1	12
7	8	9	10	11	12	11
18	17	16	15	14	13	10
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29	28	27	26	25	24	9
31	32	33	34	35	36	8
1	2	3	4	5	6	

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Howard W. Miller and Fred Wright
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the South + East Boundaries of T 21 S R 8 E of the S.L.B. & M., Utah.

Howard W. Miller, Chainman.
Fred Wright, Chainman.

Subscribed and sworn to before me this 3rd day of June, 1910



Andrew Nelson
U.S. Deputy Surveyor

I, Ray Bryan
do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the South and East Boundaries of T 21 S R 8 E of the S.L.B. & M., Utah.

Ray Bryan, Moundman.
Moundman.

Subscribed and sworn to before me this 3rd day of June, 1910



Andrew Nelson
U.S. Deputy Surveyor

I, Edward Jones
do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the South and East Boundaries of T 21 S R 8 E of the S.L.B. & M., Utah.

Edward Jones, Axman.
Axman.

Subscribed and sworn to before me this 3rd day of June, 1910



Andrew Nelson
U.S. Deputy Surveyor

I, Edward Jones
do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the South + East Boundaries of T 21 S R 8 E of the S.L.B. & M., Utah.

Edward Jones, Flagman.
Flagman.

Subscribed and sworn to before me this 3rd day of June, 1910



Andrew Nelson
U.S. Deputy Surveyor

South Boundry T. 21 S. ; R. 8 E.

chains

Survey commenced June 2, 1910, and executed with a W. and I.E. Gurley light mountain transit No. 9624; with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc which is also the least count of the vernier of the latitude arc. The least count of the vernier of the decl. arc is 30". The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct, and was approved by the surveyor general for Utah, May 10., 1910.

I begin at the cor. of Ts. 21 and 22 S. ; Rs. 7 and 8 E. in lat. $38^{\circ} 56' 29''$ N., longitude $111^{\circ} 07' 14''$ W.; I set off $38^{\circ} 56' 29''$ N. on the lat. arc; $22^{\circ} 12' N.$ on the decl arc; and at 4 h. 58 m. p.m.l.m.t. determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

June 2, 1910.

June 3: At 3h. 47m. a.m.l.m.t. by ~~my watch~~, I observe Polaris at eastern elongation, in accordance with the Manual of instructions and mark the point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6 h. a.m.l.m.t. I lay off the azimuth of Polaris $1^{\circ} 30' 36''$ to the W. and find that my solar and stellar observations agree.

At 6 h. 58 m. a. m.l.m.t. I set off $38^{\circ} 56' 29''$ on the lat. arc; $22^{\circ} 16\frac{1}{2}' N.$ on the decl. arc; and determine a meridian with the solar. This meridian agrees with the Polaris meridian. I therefore conclude that the instrument is in adjustment.

The magnetic bearing of the true meridian is $16^{\circ} 35' W.$; which gives the mag. decl. $16^{\circ} 35' E.$

From the Tp. cor. already described, I run East, bet. secs. 6 and 31

South boundry T. 21 S.; R 8 E.

chains	Over level land.
2.90	Road, bears NW. and SE.
25.20	Wash, 10 lks. wide, course N.
	Enter mountainous land, asc. rocky W. slope of ridge.
30.00	Top of ridge, 100 ft. above wash, bears N 20° W. and S. Descend 100 ft. to
34.50	Base of ridge, bears N. 20° W. and S.
	Thence over rolling land.
37.67	Set an iron post, 3 ft. long, 1 in. in dia.; 25 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 31 on N. half and S 6 on S half; dig pits 18 / 18 / 12 ins. E. and W. of post, 3 ft. dist. and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
45.60	Wash, course N. 25° E.
69.50	Wash, course N.
73.75	Wash, 8 ft. deep, 10 lks. wide, course N.
77.67	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked on brass cap T 21 S R 8 E on N. half, T 22 S on S. half, S 32 in NE. S 5 in SE. S 6 in SW. and S 31 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
	Land, rolling, level and mountainous.
	Soil, sandy loam and rocky; 1st and 4th rates.
	No timber.
	Mountainous land 9.30 chs.
	East, bet. secs. 5 and 32
	Over rolling land.
33.00	Wash, course NW.

South Boundry T. 21 S. R. 8 E.

chains
 35.00 Enter ... of rocky ...
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 32 on N. half and S. 5 on S. half; and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
 Gradually asc. over rocky land sloping W.
 44.00 Enter forest of cedar and pinon; bears N. and S.
 58.00 Leave timber and rocky land; bears N. and S.; thence over rolling land.
 63.00 Wash, course N.
 68.95 Wash, course N. 20° E.
 70.25 Wash, 6 ft. deep, course N.
 77.60 Wash, 10 ft. wide, course N. 25° W.; asc. 25 ft. to
 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked on brass cap
 T 21 S R 8 E on N. half,
 T 22 S on S. half,
 S 33 in NE.
 S 4 in SE.
 S 5 in SW. and
 S 32 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, rolling.
 Soil, sandy loam and rocky; 1st and 4th rates.
 Timber, cedar and pinon on 14.00 chs.
 June 3: At this sec. cor. I set off 22° 17' N. on the decl. arc; and at 11 h. 58 m. a. m. t. observe the sun on the meridian; the resulting lat. is 38° 56 $\frac{1}{2}$ '
 East, bet secs 4 and 33
 Over rolling land.

15.00 Descend over sandstone benches, bears NE. and SW.
 Enter scattering cedar and pinon

South Boundry T. 21 S. R. 8 E.

chains

33.00 Leave timber and benches, bears NE. and SW.

34.10 Wash, 20 lks. wide, course SE.

37.00 Same wash, course N. 30° E.; thence along channel of wash.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. marked on brass cap $\frac{1}{2}$ S 33 on N. and S 4 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

42.00 Same wash, course NE.

46.40 Wash, 15 lks. wide, 8 ft. deep, course N; ascend.

66.00 Low ridge, bears N. and S.
Descend towards wash.

73.20 Top 15 ft. ledge, bears N. and S.
Descend 50 ft. to

74.00 Center of wash, 40 lks. wide, course N.; ascend.

74.80 Ledge, 15 ft. high, bears N. and S.

76.00 Thence over rolling land.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked on brass cap
T 21 S R 8 E on N. half,
T 22 S on S. half
S 34 in NE.
S 3 in SE.
S 4 in SW. and
S 33 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

land, hilly and rolling.
Soil, sandy loam and rocky; 1st. and 3rd. rates.
Timber, scattering cedar. on 18.00 chs.

East, bet. secs. 3 and 34
Gradually asc. over rolling land.

South Boundry T. 21 S.; R. 8 E.

chains
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for sec. cor. marked on brass cap $\frac{1}{4}$ S 34 on N. half and S 3 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.

43.00 Thence over land sloping NE. descend

59.00 Enter sandstone bed rock.

79.40 Wash, 10 lks. wide, 15 ft. deep, course N.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of earth and stone, for cor of secs. 2,3,34 and 35, marked on brass cap

T 21 S R 8 E on N. half,
 T 22 S on S half,
 S 35 in NE.
 S 2 in SE.
 S 3 in SW. and
 S 34 in NW. quadrant and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, rolling and broken.

Soil. sandy loam and rocky: 1 st and 4th rates.
 No timber.

June 3, 1910.

June 4: At 7h. 58m.a.m.l.m.t. I set off $38^{\circ} 56\frac{1}{2}'$ N. on the lat. arc; $22^{\circ} 24'$ N. on the decl. arc; and determine a meridian with the solar at the cor of secs. 2,3, 34 and 35

Thence I run

East, bet, secs. 2 and 35

Over hilly land, ascending over bed rock

6.00 Leave bed rock, bears N. and S.

8.00 Ridge, bears N. and S.; descend

25.00 Leave hilly land, bears N. and S.

Thence over gently rolling land

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

.South Boundry T. 21 S. ; R. 8 E.

- Chains the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 35 on N. half and S 2 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
- 61.50 Foot of ridge, bears N. and S.
Ascend 60 ft. to
- 66.00 Top of ridge, bears N. and S.; descend
- 68.00 Foot of ridge, bears N. and S.
- 74.40 Salt Wash, 50 lks. wide. 15 ft. deep, course N.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap
- T 21 S R 8 E on N. half,
T 22 S on S. half,
S 36 in NE.
S 1 in SE.
S 2 in SW. and
S 35 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
- Land, gently rolling and hilly.
Soil, sandy loam and rocky; 1 st and 3 rd rates.
No timber.
-
- East, bet. secs. 1 and 36
Over rolling land.
- 2.00 Enter hilly land, bears N. and SW.; ascend 40 ft. to
- 22.00 Low ridge, bears N. and S.; descend
- 30.52 Wash, course N 30° E.
- 40.00 On W. side of small flat. bears N. and S. Set an iron post, 3ft. long, lin. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 36 on N. half and S 1 on S half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
- 44.00 East side of flat, bears N. and S.

South boundry T. 21 S. ; R. 8 E.

chains

72.00 Wash, 30 lks. wide, 6 ft. deep. course N.

76.40 Ridge, bears N. and S.

80.00 Set an iron post, 3ft. long, 3 ins. in dia. 24 ins. in the ground, for cor. of Ts. 21 and 22 S. ; Rs. 8 and 9 E., marked on brass cap

T 21 S on N. half,

T 22 S on S. half,

S 31 R 9 E in NE.

S 6 R 9 E in SE.

S 1 R 8 E in SW. and

S 36 R 8 E in NW. quadrant dig pits , 24 / 24 / 12 ins. on each line, N., E., and W., 4 ft., and S. of post, 8 ft. dist.; and raise a mound of earth, 5 ft. base, 2½ ft. high, S. of cor.

Land, rolling and hilly.

Soil, sandy loam and adobe; 1 st and 3 rd rates.

No timber.

June 4 : At this Tp. cor I set off 22° 24½' N. on the decl. arc; and at 11h. 58m. a.m. l.m.t. observe the sun on the meridian; the resulting lat. is 38° 5 6½'.

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Page

East Boundry T. 21 S.; R. 8 E.

chains	
	From the cor of Ts. 21 and 22 S.; Rs. 8 and 9 E. I run North, bet. secs. 31 and 36
	Over hilly land draining W.
1.15	Enter wash, course NN.
	Thence along E. side of wash.
6.75	Wash turns N. 85° W.; ascend
13.25	Ridge; bears E. and W.; descend
21.25	Wash, 10 lks. wide; course W.; ascend
25.00	Ridge; bears E. and W.; descend
30.00	Wash, course W.
39.60	Wash, course NW.
40.00	Set an iron post, 3 ft. long; 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 36° on W. half and S 31° on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base; 1 $\frac{1}{2}$ ft. high W. of cor.
47.60	Wash, course NW.
54.20	Wash, course NW.
59.55	Wash. course NW.
62.40	Wash, 10 lks wide, 30 ft. deep, course N. 70° W.
68.65	Wash, course NW.
71.50	Wash, course NW.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap T 21 S on N. half, R 9 E S 30 in NE. S 31 in SE. S 36 in SW. and R 8 E S 25 in NW quadrant; dig pits 18 / 18 / 12 ins. in each sec.; 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base; 2 ft. high W. of cor.
	Land; hilly.
	Soil, adobe; 4th rate.
	No timber.

East, boundry T 21 S.; R 8 E

Chains	
	North, bet. secs. 25 and 30
	Over hilly land sloping W.
5.00	Wash, course W.; ascend.
12.00	Ridge, bears NW. and E.; descend.
23.00	Wash, 10 lks. wide, course NW.; ascend.
25.50	Spur, projects W.; descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 25 on W. half and S 30 on E. half; dig pits 18 / 18 / 12 ins N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
40.60	Wash, course W.; ascend.
46.30	Ridge, bears E. and W.; descend.
58.00	Leave hills, bear NE. and SW.; thence over gently rolling land.
76.00	Enter hills, bears SE. and W.
80.00	Set an iron post, 3ft. long, 3 ins. in dia., 24 ins. in the ground, for cor of secs. 19, 24, 25 and 30, marked on brass cap
	T 21 S on N. half,
	R 9 E S 19 in NE.
	S 30 in SE.
	S 25 in SW. and
	S 24 R 8 E in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
	Land, hilly and gently rolling:
	Soil, adobe and sandy loam; 4 th. and 1 st. rates.
	No timber
	June 4, 1910.

June 5: At 7 h. 58m. a. m. l. r. t. t. I set off $38^{\circ} 58\frac{1}{2}'$ N. on the lat. arc; $22^{\circ} 30\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor of secs. 19, 24, 25 and 30.

Thence I run

East Boundry T. 21 S. ; R. 8 E

chains	North, bet. secs. 19 and 24. Over hilly land Ascend 35 ft. to 6.00 Top of rolling bench, bears E. and W.; gradually desc. 28.60 Wash, 30 ft. deep, course NW. Ascend 40 ft. to 33.50 Ridge, bears N. 20° W. and SE.; descend 34.50 Head of draw, course N. 20° E. 40.00 Foot of bench, bears N. 20° E. and N. 80° W. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 24 on W. half and S. 19 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. 41.10 Wash, course NW. 56.00 Enter high greasewood, bears NE. and SW. 74.90 Salt Wash, 30 lks. wide, 10 ft. deep, course S. 80° E. for 8 chs. thence NE. 80.00 Set an iron post, 3 ft. long, 3 ins. in dia. 24 ins. in the ground, for cor of secs. 13, 18, 19 and 24, marked on brass cap T 21 S on N. half, R 9 E S 18 in NE. S 19 in SE. S 24 in SW. and R 8 E S 13 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, hilly and gently rolling. Soil, gravelly and sandy; 2 nd and 3 rd rates. Undergrowth, greasewood on 24.00 chs. No timber.
20.00	North, bet. secs. 13 and 18 Over gently rolling land Salt Wash bears E. 2 chs.

East Boundry T. 21 S. ; R. 8 E.

chains	
24.25	Wash, 10 lks. wide, 20 ft. deep, course E.
37.00	Base of mesa bears NE and S25° W. Thence up steep ascent.
38.00	Perpendicular 50 ft. ledge, bears NE and S. 25° W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 13 on W. half and S 18 on E. half; and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
40.35	Base of 35 ft. perpendicular ledge, bears NE. and SW.
40.40	Top of ledge and mesa, bears NE. and S 25° W. Thence gradually desc. over rolling land sloping NW.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap T 21 S on N. half, R 9 E S 7 in NE. S 18 in SE. S 13 in SW. and R 8 E S 12 in NW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, mountainous and rolling. Soil, sandy and rocky; 2nd and 4th rates. Mountainous land 3.40 chs. June 5: At this sec. cor I set off 22° 32' N. on the decl. arc; and at 11h.58.m.a.m. 1.m. to observe the sun on the meridian; the resulting lat. is 39° 00'.
	North, bet, secs. 7 and 12. Over hilly land thru deep sand and undergrowth of chadscale
31.00	Base of ledges, bears E. and W.; ascend
34.50	Top of ledges, 75 ft. high, bears E. and W.

East Boundry T. 21 S., R. 8 E.

chains

Descend abruptly over ledges into wash.

38.00 Wash, 20 lks. wide, 15 ft. deep, 100 ft. below top of ledges, course E.

40.00 Point for $\frac{1}{4}$ sec. cor. falls in wash.

41.00 On top of low spur, projecting E.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap

T 21 S. in N.,

R 9 E S 7 in E., and

R 8 E S 12 in W. half, with W C $\frac{1}{4}$ near center;

dig pits 18 x 18 x 12 ins., N. and S. of post, 3 ft.

dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.

high W. of cor.

41.90 Wash, 50 lks. wide, course E., turns SW. 1 ch. E.

43.15 Base 100 ft. ledge, bears NW. and SE.

43.20 Top of same.

Thence gradually ascend over bedrock.

60.40 Leave bedrock, bears SE. and SW.

Continue gradual ascent.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1-6-7 and 12, marked on

brass cap

T 21 S in N. half,

R 9 E S 5 in NE.,

S 7 in SE.,

S 12 in SW., and

R 8 E S 1 in NW. quadrant; dig pits 18 x 18 x

12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound

of earth 4 ft. base, 2 ft. high W. of cor.

Land, hilly and mountainous.

Soil, sandy and rocky; 2nd and 4th rates.

Mountainous land 29.60 chs.

No timber.

East boundary of T. 21 S., R. 8 E.

chains	North bet. secs. 1 and 6. Over rolling land, sloping SW.
29.00	Low ridge, bears NE. and W. Thence ascend over land sloping NW.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 1 on W. half, and S 6 on E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
70.40	Wash, course NW.; ascend.
72.00	Low ridge, bears E. and W.
76.15	Wash, course N. 80° W.
84.00	Wash, course NW.
92.80	Wash, course NW.
101.93	Intersect the N. bdy. of the Tp. 5.51 chs. S 89° 52' W of the standard cor. of T 20 S., R. 8 and 9 E., marked heretofore described. Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of T 21 S., R. 8 and 9 E., marked on brass cap T20S R8E S36 S31 R9E on N. half, and S1 R8E CC T21S R9E S6 in S. half; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high S. of cor. Pits impracticable. Land, rolling and broken. Soil, rocky and sandy; 3rd and 4th rates. No timber.

June 5, 1910.

For general description see book "E" of this survey.



U. S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W. Miller

Andrew Nelson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the South and East Boundaries of T21SR&E of the S.L.B. & M., Utah, showing the respective capacities in which they acted:

- Howard W. Miller Chainman.
- Fred Wright Chainman.
- Ray Bryan Moundman.
- Moundman.
- Edward Jones Axman.
- Axman.
- Edward Jones Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W. Miller

Andrew Nelson, United States Deputy Surveyor, in surveying all those parts or portions of the South and East Boundaries T21SR&E

of the Salt Lake Base meridian, Utah State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

- Howard W. Miller Chainman.
- Fred Wright Chainman.
- Moundman.
- Ray Bryan Moundman.
- Edward Jones Axman.
- Axman.
- Flagman.

Edward Jones Flagman

Subscribed and sworn to before me this 5 day of June, 1910

Andrew Nelson
U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew Nelson, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the East and South Boundaries of Township 21 South, Range 8 East

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Andrew Nelson
United States Deputy Surveyor.

Subscribed by said Andrew Nelson, and sworn to before me) this 30 day of December, 1910

Thomas Hull
U.S. Surveyor-General



for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1910

The foregoing field notes of the survey of the East and South Boundaries of Township 21 South, Range 8 East of the Salt Lake Base and Meridian, Utah,

received by their Howard W. Miller and Andrew Nelson under his contract No. 316, dated January 15, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK " E "

FILED

DEC 30 1910

11/13

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION OF

T. 21 S., R 8 E.

Of the Salt Lake Base and Meridian,

U T A H

AS SURVEYED BY

Howard W. Miller and Andrew Nelson, *United States Deputy Surveyor,*

Under his Contract No. 316, *dated* Jan. 15, 1910, 190

Survey commenced June 6, 1910, 190

Survey completed June 20, 1910, 190

31-14-99 ✓

32-22 ✓

NAMES AND DUTIES OF ASSISTANTS

FRANK R. MILLER, ASSISTANT

FRANK R. MILLER, ASSISTANT

FRANK R. MILLER, ASSISTANT

FRANK R. MILLER, ASSISTANT

BOOK A-369

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Township 21 S, Range 8 E

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Howard W Miller and Fred Wright

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

The subdivision of T 21 S, R 8 E of the S.L.B. & M., Utah.

Howard W Miller, Chainman.
Fred Wright, Chainman.

Subscribed and sworn to before me this 4th day of June, 1900



Andrew Nelson
U.S. Deputy Surveyor

WE, Roy Bryan and

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

Subdivisions of T 21 S, R 8 E of the S.L.B. & M., Utah.

Roy Bryan, Moundman.
Moundman.

Subscribed and sworn to before me this 4th day of June, 1900



Andrew Nelson
U.S. Deputy Surveyor

WE, Edward Jones and

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Subdivision of T 21 S, R 8 E of the S.L.B. & M., Utah.

Edward Jones, Axman.
Axman.

Subscribed and sworn to before me this 4th day of June, 1900



Andrew Nelson
U.S. Deputy Surveyor

I, Edward Jones, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

Subdivision of T 21 S, R 8 E of the S.L.B. & M., Utah.

Edward Jones, Flagman.

Subscribed and sworn to before me this 4th day of June, 1900



Andrew Nelson
U.S. Deputy Surveyor

Subdivisions of T. 21 S., R. 8 E.

chains

Survey commenced June 5, 1910 and executed with a W.&L. E. Gurley light mountain transit No. 9624, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc, which is also the least count of the vernier of the lat. arc. The least count of the vernier of the decl. arc. is 30".

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct, and was approved by the Surveyor General for Utah, May 10, 1910.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36 on the S. bdy of the tp., heretofore described; latitude $38^{\circ}56'29''$ N.; longitude $111^{\circ}01'54''$ W.; I set off $38^{\circ}56'29''$ N. on the lat. arc; $22^{\circ}34'$ N. on the decl. arc; and at 4h 58m p.m.l.m.t. determine with the solar a meridian and mark the point thereof, on a stone firmly set in the ground 5chs. N. of the cor. June 5, 1910.

June 6: At 2h 36m a.m.l.m.t., by my watch. I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground 5chs. N. of my station. At 6h am.l.m.t., I lay off the azimuth of Polaris $1^{\circ}30'36''$ to the W., and find that my solar and stellar meridian agree.

At 7h 58m am.l.m.t., I set off $38^{\circ}56'29''$ N. on the lat. arc; $22^{\circ}37\frac{1}{4}'$ N. on the decl. arc; and determine a meridian with the solar. This meridian agrees with Polaris meridian; I therefore conclude that the instrument is in adjustment.

Subdivision of T. 21 S., R. 8 E.

chains

The magnetic bearing of the true meridian, at 8h 30m a.m., is N. $16^{\circ} 35'$ W., the angle thus determined gives the mag. decl. $16^{\circ} 35'$ E.

I commence at the cor. of secs. 1- 2- 35 and 36 on the S. bdy. of the Tp., heretofore described .

Thence I run

N. $0^{\circ} 01'$ W. bet. secs. 35 and 36.

Over gently rolling land.

17.00 Enter hilly land, bears NW. and SE.

21.00 Spur, projects W.

Thence over series of small ridges and draws, putting W.

27.00 Ridge, bears N. 80° W., and S. 80° E.

35.00 Ridge, bears NW. and E.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 35 on W. half, and S 36 on E. half; dig pits 18x 18 x 12 ins. N. and S. of post, 3 ft. dist.; raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

44.45 Wash, course N. 20° E.

45.65 Wash, 10 lks. wide, course NW.; ascend.

59.75 Spur, projects W.

75.00 Leave hills, bears NE. and S. 30° W.

Thence over rolling land.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked on brass cap

T 21 S S 26 in NW.,

R 8 E S 25 in NE.,

S 36 in SE., and

S 35 in SW. quadrant; dig pits 18 x 18 x 12 ins.

Subdivisions T. 21 S.; R. 8 E.

chains	Soil, sandy loam and gravelly; 1 st and 3 rd rates. No timber.
	East, on a random line bet. secs. 25 and 36
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect the E. bdy. of Tp. at the cor. of secs. 25, 30, 31 and 36, heretofore described. Thence I run West, on a true line bet. secs. 25 and 36 Over hilly land.; ascend
4.00	Ridge, bears N. and S.; descend
6.35	Wash, 10 lks. wide, course N.; ascend
26.25	Ridge, bears NE. and SW. 1 ch.; descend
31.50	Wash, course NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S. 25 on N. half and S 36 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
47.50	Ridge, bears N. and S.
72.00	Ridge, bears N. and S.; desc. 50 ft. to
75.00	Leave hilly land, bears NE. and SW. Thence over rolling land.
80.00	The cor. of secs. 25, 26, 35 and 36. Land, hilly and rolling. Soil, gravelly; 2 nd rate. No timber.
	June 6 : At this sec. cor. I set off $22^{\circ} 38'$ N. on the decl. arc; and at 11 h. 58 m. ^{am} 1.m.t., observe the sun on the meridian; the resulting lat is $38^{\circ} 57\frac{1}{2}'$.
	N. $0^{\circ} 01'$ W., bet. secs. 25 and 26. Over rolling land.
21.00	Top small knoll.; descend
39.20	Wash, course NE.

Subdivisions T. 21 S. ; R. 8 E.

- 32.00 Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for 4 sec. cor. marked on brass cap $\frac{1}{4}$ S 26 on W. half and S 23 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth 31 ft. base $1\frac{1}{2}$ ft. high W. of cor.
- 33.25 Wash, course NE.
- 34.15 Salt Wash, 50 lks. wide, 15 ft. deep, course E. Thence up over hilly land.
- 34.50 Spur, projects W. 1 ch.
- 35.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked on brass cap
 T 21 S S 23 in NW.
 R 8 E S 24 in NE.
 S 25 in SE. and
 S 26 in SW quadrant dig pits 18 / 18 / 12 ins. in each sec., 31 ft. dist.; and raise a mound of earth 3 ft. base, 2 ft. high W. of cor.
 Land, rolling and hilly:
 Soil, sandy; 2 nd rate.
 No timber.
-
- 36.00 East, on a random line bet. secs. 24 and 25
- 40.00 Set temp. 4 sec. cor.
- 50.00 Intersect E. bdy. Tp. 5 lks. S. of cor. of secs. 19, 24, 25 and 30, heretofore described.
 Thence I run
 S 22° 55' W., on a true line bet. secs. 24 and 25.
 Over hilly land.
- 10.00 Move hills, bears N. and SE.
 Thence over rolling land
- 11.00 Wash, course NW.
- 17.55 Wash, course N.
- 19.00 Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in

Subdivisions T. 21 S.; R. 8 E.

chains the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 24 on N. half and S 25 on S half; dig pits 18" / 18" / 12 ins E. and W. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

55.25 Salt Wash, 80 lks. wide, 10 ft. deep. course N.

68.00 Enter hilly land, bears N. and S.; ascend.

78.00 Top of butte,; descend

80.00 The cor. of secs. 23, 24, 25 and 26.

Land, rolling and hilly.

Soil, gravelly; 3rd rate.

No timber.

June 6, 1910

June 7: At 6 h. 58 m.a. m. l. m. t., I set off $38^{\circ} 58'$ on the lat. arc; $22^{\circ} 43\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.

Thence I run

N. $0^{\circ} 01'$ W., bet. secs. 23 and 24.

Over hilly land, gradually descending

5.00 Draw, course E.

Ascend towards mesa

11.00 Base of mesa and steep ascent, bears NE and SW.

Thence up steep rocky ascent over SE. face of mesa.

12.40 50 ft. perpendicular ledge, bears NE. and SW.

13.90 Top 25 ft. ledge, and mesa, 175 ft. above base, bears NE. and SW.

Thence over mesa top, gradually descending

24.00 Wash, course W.

34.00 Wash, course W.; ascend

38.00 Ridge, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 23 on W. half and S 24 on E. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Subdivisions T. 21 S. ; R. 8 E.

chains	icable.
	Descend over land facing N.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked on brass cap
	T21 S S 14 in NW.
	R 8 E S 13 in NE.
	S 24 in SE. and
	S 23 in SW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5½ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
	Land, mountainous.
	Soil. rocky and sandy; 4 th and 2 nd rates.
	No timber.
	Mountainous land 80.00 chs.
	N. 89° 58' E., on a random line bet. secs. 13 and 24.
40.00	Set temp. ¼ sec, cor.
80.00	Intersect the E. bdy. Tp. 51 N. of cor. of secs. 13, 18, 19 and 24.; heretofore described.
	Thence I run
	West, on a true line bet. secs. 13 and 24;
	Over hilly land sloping SE.
8.00	Low ridge, bears N. and S.; descend
9.00	Wash, course S. 20° W.; gradually asc. towards mesa
18.00	Base of mesa, bears N. 20° E. and S 20° W.
	Thence up steep rocky ascent.
19.00	Ledge, 50 ft. high, bears N. 20° E. and S. 20° W.
21.00	Top 20 ft. ledge and mesa, 150 ft. above base, bears N. 20° E. and S. 20° W.
	Continue to ascend.
26.00	Ridge, bears N. and S.
	Thence over land sloping NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Subdivisions T. 21 S. ; R 8 E.

- chains the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 13 on N. half and S 24 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
- 52.00 S. of my line 3 chs. dist. is a rocky knoal
- 80.00 The cor. of secs. 13, 14, 23 and 24. Land, rolling and mountainous. Soil, sandy and rocky; 2nd and 4th rates. No timber. Mountainous land-8.00 chs. June 7; At this sec. cor I set off $22^{\circ} 44\frac{1}{2}'$ N. on the decl. arc; and at 11h. 58 m. ^{am} 1. m. t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 59'$.
-
- N. $0^{\circ} 01'$ W., bet secs; 13 and 14. Gradually desc. over rolling land sloping NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 lns. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 14 on W. half and S 13 on E half; dig pits 18 / 18 / 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
- 52.00 Wash, 20 lks. wide, course N 75° E.; and base of mountain, ascend steep land facing SE.
- 58.00 Spur, projects E.; desc. 50 ft. to
- 62.80 Wash, course SE. asc. 100 ft. to
- 71.50 Top of ascent, thence over broken land
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor of secs. 11, 12, 13 and 14, marked on brass cap
- T. 21 S S11 in NW.
R. 8 E S 12 in NE.
S 13 in SE. and
S 14 in SW. quadrant and raise a mound of stone 2 ft, base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Land rolling and mountainous

Subdivisions, T 21 S. ; R. 8 E.

chains Soil, sandy and rocky; 2 nd. and 4 th rates.
 No timber.
 Mountainous land 28.00 chs.

East, on a random line bet. secs. 12 and 13

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect E. bdy. Tp! 2 lks. S. of the cor. of secs.
 7, 12, 13 and 18 heretofore described,

Thence I run

S. $89^{\circ} 59'$ w., on a true line bet. secs. 12 and 13

Over hilly land.

26.70 Wash, course NE.

40.01 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 12
 on N. and S 13 on S. half; dig pits 18 / 18 / 12 ins.
 E. and W. of post 3 ft. dist. and raise a mound of earth
 $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.

62.00 Wash, 20 lks. wide, course SW. and SW.

Enter Mountainous land, begin steep ascent over rocky
 land sloping SE.

77.00 Top of ascent, 200 ft. above wash, bears NE. and SW.

Thence over broken land.

80.02 The cor. of secs. 11, 12, 13 and 14.

Land, hilly and mountainous.

Soil, sandy and rocky; 2 nd and 4 th rates.

No timber.

Mountainous land 18.00 chs.

June 7, 1910.

June 8: At 6 h. 59^{am} 1. m. t., I set off $39^{\circ} 00'$ on
 the lat. arc; $22^{\circ} 49\frac{1}{2}'$ N. on the decl. arc; and deter-
 mine a meridian with the solar at the cor. of secs 11,
 12, 13 and 14.

Thence I run
 N. $0^{\circ} 01'$ W., bet. secs. 11 and 12.

Subdivisions T. 21 S.; R. 8 E.

- chains Over mountainous land.
- 8.50 Spur, 30 ft. above sec. cor., projects W.; descend
- 9.75 Wash, course W.; ascend
- 110.20 Spur, projects W. descend
- 13.50 Wash, course NW.
- 22.70 Wash, course W.; ascend
- 25.00 Spur, 30 ft. above wash, projects W.
Descend 50 ft. to
- 33.90 Wash, 25 lks. wide, course E. An alkali seep extends along this wash.
- 37.60 Ridge, bears E. and W. Enter scattering forest of cedar and pinon.
Gradually desc. over rocky land
- 40.00 Set an iron post, 3 ft. long, 1 1/2 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. marked on brass cap 1/4 S 11 on W. and S 12 on E. half; from which
A cedar, 11 ins. diam., bears N. 43 1/2° E., 98 lks. dist., marked 1/4 S 12 B T.
and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor. No other bearing trees within limits.
- 47.00 Wash, course E.; ascend
- 52.30 Low spur near W. end projects W.; descend
- 63.00 Wash, 5 lks wide, course SE.
- 74.20 Wash, course SE.; thence along wash
- 78.75 Wash turns N. 20° W.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked on brass cap
T 21 S S 2 in NW.
R 8 E S 1 in NE.
S 12 in SE. and
S 11 in SW. quadrant dig pits 18 / 18 / 12 ins. in each sec., 5 1/2 ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, mountainous.

Subdivisions T 21. S. ; R. 8. E.

chains	Soil, rocky; 4 th. rate. Timber, scattering cedar and pinon Mountainous or timbered land 80.00 chs.
40.00	N. $89^{\circ} 59'$ E., on a random line bet. secs. 1 and 12 Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect E. bdy. Tp. 9 lks. S. of the cor of secs. 1, 6, 7, and 12 heretofore described Thence I run S. $89^{\circ} 55'$ W., on a true line bet. secs. 1 and 12 Gradually desc. over rolling land
31.00	Wash, course S.; enter mountainous land; asc
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 1 on N. and S 12 on S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
55.00	Top of ascent and ridge; 125 ft. above wash, bears N. and S. Thence descend over land sloping W.
59.75	Wash in Head of draw, course S. 60° W.
67.95	Wash, course S.
80.00	The cor of secs. 1, 2, 11 and 12. Land, mountainous and rolling Soil, rocky and sandy; 4th. and 2nd. rates. No timber. Mountainous land 49.00 chs. June 8: At this sec. cor. I set off $22^{\circ} 50'$ N. on the decl. arc; and at 11 h. 59 m. ^{am} 1. m. t. observe the sun on the meridian; the resulting lat. is $39^{\circ} 01'$.
4.25	N. $0^{\circ} 01'$ W., bet. secs. 1 and 2 Over mountainous land.
6.40	Base of ridge, bears NE. and SW. ascend Sharp, rocky ridge, 50 ft. high, bears NE. and SW.; Descend

Subdivisions T. 21 S.; R. 8 E.

- chains
- 9.00 Hollow, drains SW.; ascend
- 18.00 Low ridge, bears NW. and SE.; descend
- 22.65 Wash, course NE.; ascend
- 27.00 Enter cedar and pinon, bears NE. and NW.
- 35.75 Top of ascent and leave timber, bears E. and W.; descend
- 37.20 Base of descent, 50 ft. below top, bears E. and W.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 2 on W. half and S 1 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 44.22 Wash, 10 lks. wide, course NE.
- 45.30 Same wash, course NW.
- 50.75 Same wash, course NE.
- 54.00 Same wash, course NW.
- 55.30 Same wash, course NE.
- 72.75 Base of ridge, bears NE and SW.; ascend
- 89.00 Ridge, bears NE and SW.; descend
- 96.00 Wash, course SW.; thence up wash
- 99.00 Leave wash, turns NE.
- 102.03 Intersect N. bdy. Tp. 5.28 chs. N. $89^{\circ} 54'$ W. of the standard cor of secs. 35 and 36, hereto for described. Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground, for C.C. of secs. 1 and 2, marked on brass cap
 T 20 S R 8 E S 35 C C S 36 on N. half,
 S 1 in SE. and
 S 2 in SW. quadrant and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high S. of cor.
 Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4 th. rate.
 Timber, cedar and pinon on 8.75 chs.
 Mountainous land 102.03 chs.

June, 8, 1910

Subdivisions T. 21 S. ; R. 8 E.

chains	<p>June 9: At 6h. 59m. a.m. l.m.t. I set off $36^{\circ} 56' 29''$ N. on the lat. arc; $22^{\circ} 55'$ N. on the decl. arc. and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on the S. bdy of the Tp. heretofore described.</p> <p>Thence I run</p> <p>N. $0^{\circ} 01'$ W., bet. secs. 34 and 35.</p> <p>Over mountainous land</p> <p>Descend rocky land sloping NW.</p>
2.20	Draw, course W. Thence over land facing W.
7.20	Ledge, 10 ft. high, bears E. and W.
	Descend 30 ft. into wash
8.60	Wash, course E.
10.47	Base of mesa, begin steep ascent up mesa over series of small ledges.
26.00	Top of ascent and mesa, 175 ft. above base, bears NE and SW.
	Thence gradually descend over land sloping NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 34 on W. half and S 35 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
55.00	Begin steep descent over land sloping nearly N.
59.30	Top 30 ft. ledge, bears E. and W.
63.15	Wash, 50 lks. wide, 10 ft. deep, course N.; thence along E. bank of wash.
	East of line 2 chs. dist. is a high ledge bearing N. and S.
72.00	Same wash, course NE.
74.35	Same wash, course NW.
78.50	On W. side of butte, descend
80.00	At foot of butte, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of earth and stone for cor. Of secs. 26, 27, 34 and 35, marked on brass cap

Subdivisions T. 21 S. ; R. 8 E.

chains

T 21 S S 27 in NW.
 R 8 E S 26 in NE,
 S 35 in SE. and
 S 34 in SW. quadrant and raise a mound of stone 2 ft

base 1½ ft. high W. of cor. Impossible to set post in ground.
 Pits impracticable

Land, mountainous.

Soil, rocky and sandy; 4th rate.

No timber.

Mountainous land 80.00, chs.

East, on a random line bet. secs. 26 and 35

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line 7 lks. N. of the cor of secs. 25, 26, 35 and 36.

Thence I run

N. 89° 57' W., on a true line bet. secs. 26 and 35.

Over rolling land

17.20 Wash, course N.; ascend

25.00 Ridge, bears N. and S.; descend

32.00 Base of ridge, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 26 on N. half and S 35 on S. half; dig pits 18 / 18 / 12 ins E. and W. of post 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.

54.20 Wash, course N.

55.75 Wash, course NE.

66.00 Two sandstone pinnacles 100 ft. high, bear S. 4 chs.

71.30 Wash, 105 lks wide, 10 ft. deep, course N.

76.50 Same wash, 210 lks. wide, 10 ft. deep, course S. 80° E.

80.00 The cor of secs. 26, 27, 34 and 35.

Land, rolling.

Soil, sandy loam; 1 st. rate.

No timber.

Subdivisions T. 21 S. ; R. 8 E.

- chairs N. $0^{\circ} 01'$ W., bet. secs. 26 and 27.
- Over mountainous land,; descend towards wash
- 3.00 Wash, 75 lks wide, 10 ft deep, course E.
Ascend towards mesa.
- 6.00 Base of mesa and steep ascent, bears E. and W
Thence up steep rocky ascent.
- 10.00 Top of steep ascent, 100 ft. above base, bears E. and W.
Continue to ascend.
- 16.50 Top of ascent and mesa, bears E. and W.
Thence gradually descend over land sloping NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 27
on W. half and S 26 on E. half; dig pits 18 / 18 / 12
ins. N. and S. of post 3 ft. dist.; and raise a mound
of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
June 9: At this $\frac{1}{4}$ sec. cor I set off $22^{\circ} 55\frac{1}{4}'$ N. on the
decl. arc. and at 11 h. 59 m.^{am}. m. t. observe the sun
on the meridian; the resulting lat. is $38^{\circ} 58'$.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins.
in the ground, for cor. of secs. 22, 23, 26 and 27,
marked on brass cap
T 21 S S 22 in NW.
R 8 E S 23 in NE.
S 26 in SE. and
S 27 in SW. quadrant and raise a mound of stone 2 ft.
base, $1\frac{1}{2}$ ft. high W. of cor.
Pits impracticable.
Land rolling and mountainous.
Soil, sandy and rocky; 2 nd. and 4 th. rates.
No timber.
Mountainous land 16.50 chs.

S. $89^{\circ} 57'$ E., on a random line bet. secs. 23 and 26

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.04 Intersect N. and S. line at the cor of secs. 23, 24,

Subdivisions T. 21 S. ; R. 8 E.

chains	25 and 26.
	Thence I run
	N. $89^{\circ} 57'$ W., on a true line bet. secs. 23 and 26
	Over rolling land
12.75	Base of mesa, bears NE. and SW.;
	Thence up steep ascent over ledges
14.25	Top of mesa, 200 ft. above base, bears NE. and SW.
	Thence gradually descend over top of mesa.
34.00	Top of 30 ft. ledge, bears N. and S.
	Descend abruptly 100 ft. into gulch.
36.25	Wash in bottom of gulch, 30 lks. wide, drains S., ascend from gulch.
37.50	Ledge, 70 ft. high, bears N. and S. 20° W.
37.60	Top of gulch, bears N. and S. 20° W.
	Thence over land facing S.
40.02	Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor marked on brass cap $\frac{1}{4}$ S 23 on N. and S 26 on S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. P its impracticable.
50.50	Head of gulch, drains S. 80° E.
	Ascend over rolling land.
68.60	Wash, course SE.
73.30	Washcourse S. 60° E.
80.04	The cor of secs, 22, 23, 26 and 27.
	Land, mountainous and rolling.
	Soil, rocky; 4 th. rate.
	No timber.
	Mountainous land 37.75 chs.
	N. $90^{\circ} 01'$ W., bet. secs. 22 and 23.
	Ascend over SE. face of mesa.
4.85	Wash, 10 lks. wide, course E.
11.65	Wash, 15 lks. wide, course SE.
15.70	Wash, 10 lks. wide, course SE.
	Thence up steep ascent
28.00	Top of ascent and mesa, 200 ft. above sec. cor. bears

Subdivisions T 21 S. ; R 8 E.

- chains NE. and S. 30° W.
Thence over land sloping NW.
- 36.25 Wash, 20 lks. wide, 30 ft. deep, course NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 22 on W. half and S 23 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist; and raise a mound of earth 3 ft. base $1\frac{1}{2}$ ft. high W. of cor.
- 44.65 Wash, 20 lks. wide, 15 ft. deep, course W.
- 65.00 Wash, 10 lks wide, 20 ft. deep, course, W.
- 67.60 Wash, 10 lks. wide, 20 ft. deep, course W.
- 80.00 Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground, for cor of secs. 14, 15, 22 and 23, marked on brass cap
- T 21 S S 15 in NW.
R 8 E S 14 in NE.
S 23 in SE. and
S 22 in SW. quadrant dig pits 18 / 18 / 12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
- Land, mountainous.
Soil, gravelly; 3 d. rate.
No timber.
Mountainous land 80.00 chs.

June 9, 1910

June 10, 1910 : At 7 h. 59 m. am. l.m.t. L set off 38° 59' N. on the lat. arc; 22° 59 $\frac{1}{2}$ ' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23.

Thence I run

S. 89° 57' E., on a random line bet. secs. 14 and 23

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line 5 lks. S. of the cor of secs. 13, 14, 23 and 24.

Subdivisions T: 21 S.; R 8 E.

chains	Thence I run
	N. 89° 59' W., on a true line bet. secs. 14 and 23.
	Gradually descend over rolling land
29.45	Wash, course N. 35° E.
	Enter mountainous land, ascend
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 14 on N. half and S 23 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
47.65	Wash, 25 lks. wide, course S. 30° E.
61.05	Top of mesa, 150 ft. above base, bears N. and S. Thence descend over hilly land sloping W.
66.15	Wash, 10 lks. wide, course NW.
78.20	Wash, 10 lks. wide, 10 ft. deep, course N.
80.04	The cor. of secs. 14, 15, 22 and 23. Land, rolling and mountainous. Soil, sandy and gravelly; 2 nd and 3 rd rates. No timber. Mountainous land 31.60 chs.
	N. 0° 01' W., bet. secs. 14 and 15. Over rolling land
3.60	Wash, course NE.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 15 on W half and S 14 on E. half, dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
76.50	Wash, 15 lks. wide course N. 80° E.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked on brass cap T 21 S S 10 in NW. R 8 E S 11 in NE.

Subdivisions T. 21 S.; R 8 E.

chains

S 14 in SE. and

S 15 in SW. quadrant and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.

Land, rolling.

Soil, gravelly; 3 rd. rate.

No timber.

S. $89^{\circ} 59'$ E., on a random line bet. secs. 11 and 14

40.00

Set temp. $\frac{1}{4}$ sec. cor.

80.04

Intersect N. and S. line 2 lks. S. of the cor of secs. 11, 12, 13 and 14

Thence I run

West, on a true line bet. secs. 11 and 14

Over broken rocky land

12.00

Ridge, 75 ft. above sec. cor. N. bears SM. and S.; descend

15.10

Wash, 30 lks. wide, 25 ft. deep, course N.

Thence over series of ridges and draws putting MW.

31.40

Wash, 50 lks. wide, 10 ft. deep, course NE.; ascend

40.02

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 11 on N. half and S 14 on S half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.

Pits impracticable.

41.50

Ridge, bears NE. and SW.

57.75

Wash, 30 lks. wide, 10 ft. deep, course S. 10° E.

70.50

Wash, 30 lks. wide, 5 ft. deep, course N.

80.04

The cor. of secs. 10, 11, 14 and 15.

Land, mountainous.

Soil, rocky; 4 th. rate.

No timber.

Mountainous land 80.04 chs.

June 10: At this sec. cor I set off $23^{\circ} 00'$ N. on the decl. arc; and at 11 h. 59 m. ^{am} l.m.t. observe the sun on the meridian; the resulting lat is $39^{\circ} 00'$.

Subdivisions T 21 S 3 R 8 E.

chains N. 0° 01' W., bet. secs. 10 and 11, 1 ch. and W. ends
 Over mountainous land
 10.00 Base of high mesa and steep ascent, bears NE and W.
 Thence up steep S. face of mesa over series of small ledges
 28.00 Top of mesa and steep ascent, 200 ft. above base, bears
 NE and SW.
 Gradually ascend.
 34.00 Top of ascent, enter cedar and pinon forest.
 39.50 Leave timber, descend 30 ft. to
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 10
 on W. half and S 11 on E half; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
 Some small cedars, within limits but not suitable for
 bearing trees.
 51.00 Ridge, bears E. 1 ch. and W.; descend
 67.20 Wash, course W.; ascend
 72.00 Base of spur, bears E. and W.
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground, for cor. of secs. 2, 3, 10 and 11, marked
 on brass cap
 T 21 S S 3 in NW.
 R 8 E S 2 in NE.
 S 11 in SE. and
 S 10 in SW. quadrant and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky, 4 th. rate.
 Timber cedar and pinon.
 Mountainous and timbered land 80.00 chs.

East, on a random line bet. secs. 2 and 11

40.00 Set temp. $\frac{1}{4}$ sec. cor.

June 10, 1910

June 11 : At 6 h. 59 m. a. m. 1. m. t. I set off 39° 00'

Subdivisions T. 21 S. ; R. 8 E.

- chains on the lat. arc; $23^{\circ} 04\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the temp. $\frac{1}{4}$ sec. cor. bet. secs. 2 and 11.
- Thence I run East
- 80.04 Intersect N. and S. line 2 lks. N. of the cor. of secs. 1, 2, 11 and 12.
- Thence I run N $89^{\circ} 59'$ W., on a true line bet. secs. 2 and 11
- Ascend over mountainous land
- 4.50 Ridge, bears N. and S.; descend
- 15.55 Wash, course S.
- 19.90 Wash, course SE.
- 24.35 Wash, course SE.
- Gradually ascend towards base of mountain.
- 40.02 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 2° on N. half and S 11 on S. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable. Cor. stands at base of high mesa, bearing NE. & SW.
- Thence up steep E. face of mesa, over series of small ledges
- 57.00 Top of ascent and ridge, 450 ft. above $\frac{1}{4}$ cor. bears NE. and S.
- Thence over broken mesa top, along S. side of spur.
- 80.04. The cor. of secs. 2, 3, 10 and 11.
- Land. mountainous.
- Soil, rocky; 4 th. rate.
- No timber.
- Mountainous land 80.04 chs.
-
- $90^{\circ} 01'$ W., bet. secs. 2 and 3.
- Over mountainous land thru scattering forest of cedar and pinon.
- Ascend S. face of spur.
- 3.00 Top of spur, 75 ft. above sec. cor. bears E. and W.

Subdivisions T. 21 S.; R. 8 E.

chains	Descend abruptly 125 ft. to
9.00	Base of spur, bears E. and SW. Gradually descend.
14.75	Wash, 20 lks. wide, course S. 80° W. Thence up steep rocky land facing S.
21.00	Top of ascent and mesa, 150 ft. above wash, bears N. 80° E. and S. 80° W. Descend over mesa top thru dense forest of cedar and pinon.
28.00	Wash in gulch, 30 ft. deep, course NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 3 on W. half and S. 2 on E. half; from which A pinon, 14 ins. diam., bears S 44 $\frac{1}{2}$ ° E. 111 lks. dist., marked $\frac{1}{4}$ S 2 B T. A cedar, 11 ins. diam., bears S. 53 $\frac{1}{2}$ ° W. 15 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 3 B T.
44.85	Wash, course NW.
58.00	Leave dense timber, bears E. and W.
61.00	Descend from mesa over land sloping N., 175 ft. to
71.00	Wash, course W.; ascend 60 ft. to
74.50	Spur, projects W. Thence over land sloping nearly W.
82.25	Spur, projects W. Descend abruptly 150 ft.
88.00	Base of steep descent, bears E. and W. Continue to desc, over benches.
100.00	Base of descent, 225 ft. below spur, bears N. 80° E. and S. 80° W.
102.18	Intersect N. bdy. of Tp. 4.69 chs. N. 89° 50' W. of the standard cor. of secs. 34 and 35 heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for C C of secs. 2 and 3 marked on brass

Subdivisions T. 21 S.; R. 8 E.

chains cap

T 20 S R 8 E S 34 C C S 35 on N. half,

S 2 in SE. and

S 3 in SW. quadrant; and raise a mound of stone 2 ft. base, 1½ ft. high S. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4 th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 102.18 chs.

June 11. 1910

June 12: At 6 h. 59 m.a. m.l.m.t. I set off 38° 56½' N. on the lat. arc; 23° 09' N. on the decl. arc; and determine a meridian with the solar at the cor of secs. 3, 4, 33 and 34 on the S. bdy. of the Tp. heretofore described.

Thence I run

N. 0° 02' W., bet. secs. 33 and 34.

Over rolling land

10.50 Enter sandstone bedrock, bears E. and W.

21.00 Leave sandstone bedrock, bears E. and W.

26.80 Wash in gulch, course E.

27.20 Ledge, 20 ft. high, bears NE. and SW.

40.00 Set an iron post, 3 ft, long. 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 33 on W. half and S 34 on E. half; and raise a mound of stone 2 ft. base 1½ ft. high W. of cor. pits impracticable.

Enter clay hills.

63.15 Ridge, bears E. and W.

66.40 Wash, course E.

Thence across flat.

77.75 Right bank of wash, 20 ft. high, bears E. and W.

78.00 Channel of wash, 25 lks. wide, course E.

80.00 Point for sec. cor falls in wash. I continue my line

Subdivisions of T 21 S.; R 8 E.

chains

N. 0° 02' W., and at

80.75 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for witness cor to secs. 27, 28, 33 and 34, marked on brass cap

T 21 S S 28 in NW.

R 8 E S 27 in NE.

S 34 in SE.

S 33 in SW. quadrant and

W C in S half; dig pits 18 / 18 / 12 ins. NE., SE., SW., and NW. of cor. 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rollig and hilly.

Soil, sany and rocky; 2nd and 4th rates.

No timber.

East, from true cor. point on a randomline bet secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

79.99 Intersect N. and S. line at the cor. of secs. 26, 27, 34 and 35.

Thence I run

West, on a true line bet. secs. 27 and 34.

Over mountainous land descending towards wash.

1.35 Right bank of wash, 10 ft. high, bears N. and S.

1.60 Center of wash, course N.

1.80 Left bank of wash, bears N. and S.; ascend

8.50 Base of steep ascent, bears N. and S.

16.00 Top of ascent and ridge, 150 ft. above wash, bears N. and S.

17.00 descend abruptly, 150 ft. to

28.30 Wash, 100 lks, wide, 10 ft. banks, course SE.; asc.

30.70 Ledge, 20 ft. high, bears N, and SE.

31.10 Spur, 75 ft. above wash, projects S.; descend

31.70 Ledge, 25 ft. high, bears N. and SW.

Subdivisions T. 21 S.; R 8 E.

chains	
34.10	Center of wash, 75 lks. wide, 60 ft. below spur. course N.; ascend
36.33	Ledge, 20 ft. high, bears N. and S.
39.99½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor, marked on brass cap ¼ S 27 on N. half and S 34 on S. half; and raise a mound of stone 2 ft. base 2 ft. high N. of cor. Pits impracticable
48.00	Low ridge, bears N. and S. Thence desc. over land sloping SW.
62.80	Wash, course S.
79.99	Intersect true cor. point of secs. 27, 28, 33 and 34. Land, mountainous. Soil, rocky; 4 th rate. No timber. Mountainous land 79.99 chs.
<hr/>	
	N 0° 62' W., bet. secs. 27 and 28. (counting distances from true cor. point) Over mountainous land; ascend
0.75	The witness cor. to secs. 27, 28, 33 and 34.
3.55	Wash, course SE. Thence ascend 200 ft. over land facing S.
24.80	Ridge, bears E. and W.; desc. 75 ft.
29.75	Wash, 30 ft. deep, course E.
32.85	Wash, course E. Ascend 75 ft. to
37.50	Spur and top of ascent, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 28 on W. half and S 27 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth 3½ ft. base, 2 ft. high W. of cor.
46.40	Wash, course E.; ascend
48.50	Ridge, bears E. and W.

Subdivisions of T 21 S.; R. 8 E.

chains

- 61.80 Wash, 30ft. deep, course NE.
 68.85 Wash, course E.
 75.25 Same wash, course S. 20° W.
 76.65 Wash, course E.
 78.40 Wash, course S. 10° E.
 79.80 Same Wash, course S. 10° W.
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked on brass cap

T 21 S S 21 in NW.

R 8 E S 22 in NE.

S 27 in SE. and

S 28 in SW. quadrant; dig pits 18 / 18 / 12 ins. in each sec., 5 ½ ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high W. of Cor.

Land, mountainous.

Soil, gravelly; 3rd rate.

No timber.

Mountainous land 80.00 chs.

June 12: At this sec. cor I set off 23° 08' N. on the decl arc; and at 11h. 59 m. a. m. 1. m. t. observe the the sun on the meridian; the resulting lat. is 38° 56'.

East, on a random line bet. secs. 22 and 27.

40.00 Set temp. ¼ sec. cor.

79.97 Intersect N. and S. line at the cor. of secs. 22, 23, 26 and 27

Thence I run

West, on a true line bet. secs. 22 and 27

Over mountainous land.

Ascend steep E. face of mesa.

10.50 Top of ascent and mesa, 200 ft. above sec. cor., bears N. and S.

Thence desc. over broken land sloping NW.

Subdivisions of T. 21 S.; R. 8 E.

- chains
- 25.30 Wash, 50lks. wide, 30 ft. deep. course NW.
- 26.70 Wash, course NW.
- 32.00 Wash, course NW.
- 39.98½ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 22 on N. half and S 27 on S half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
- 40.70 Wash, course NW.
- 42.25 Wash, course NW.
- 55.00 Enter scattering cedar timber, bears NW. and SW.
- 60.00 Leave scattering timber, bears NE. and SE.
- 65.50 Wash, course S. 80° W.
- 69.25 Same wash, course NE.
- 79.85 Wash, 10 lks. wide, course S. 10° W.
- 79.97 The cor. of secs. 21, 22, 27 and 28.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, scattering cedar.
Mountainous or timbered land 79.97 chs.
-
- N. 0° 02' W., bet. secs. 21 and 22
Over rolling land sloping S.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 21 on W. half and S 22 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.
- 61.00 Base of spur, bears NE. and W.;
Asc. 75 ft. to
- 66.00 Top of spur, projects E.
Thence along E. slope of spur.
- 69.50 Desc, abruptly
- 73.00 Base of spur, bears E. and W.
Thence over rolling land

Subdivisions of T. 21 S.; R. 8 E.

chains
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, marked on brass cap
 T 21 S. S 16 in NW.
 R 8 E S 15 in NE.
 S 22 in SE. and
 S 21 in SW. quadrant; and raise a mound of stone 2 ft. base 2 ft. high W. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, sandy and rocky; 2nd and 4th rates.
 No timber.
 Mountainous land 12.00 chs.

East, on a random line bet. secs. 15 and 22
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect N. and S. line at the cor of secs. 14, 15, 22 and 23
 Thence I run
 West, on a true line bet. secs. 15 and 22
 Over rolling land sloping NW.

39.99 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 15 on N. half and S. 22 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base 2 ft. high N. of cor.

Ascend
 59.50 Low ridge, bears N. and S.
 64.25 Low ridge, bears N. and S.
 79.98 The cor. of secs. 15, 16, 21 and 22
 Land rolling.
 Soil, gravelly; 3rd rate.
 No timber.

Subdivisions of T. 21 S.; R. 8 E.

- chains N. 0° 02' W., bet. secs. 15 and 16
Over rolling land.
- 31.10 Wash, 25 lks. wide, course NE.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of earth and stone, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 16 on W. half and S 15 on E. half; and raise a mound of stone 2 ft. base 2 ft. high W. of cor. Pits impracticable.
- 43.75 Base of mesa, bears N. 80° E. and S. 80° W.
Thence up steep S. face of mesa over huge boulders.
- 57.60 Top of mesa, 375 ft. above $\frac{1}{4}$ sec. cor. bears N. 80° E. and S. 80° W.
Enter dense forest of cedar and pinon, gradually desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in a mound of earth and stone, for cor. of secs. 9, 10, 15 and 16, marked on brass cap
T 21 S S 9 in NW.
R 8 E S 10 in NE.
S 15 in SE. and
S 16 in SW. quadrant; from which
A pinon, 12 ins. diam., bears N. 77 $\frac{1}{2}$ ° E., 90 lks. dist., marked T 21 S R 8 E S 10 B T.
A pinon, 9 ins. diam., bears S. 53 $\frac{1}{2}$ ° E., 42 lks. dist., marked T 21 S R 8 E S 15 B T.
A pinon, 8 ins. diam., bears S. 25 $\frac{1}{2}$ ° W., 62 lks. dist., marked T 21 S R 8 E S 16 B. T.
A pinon, 6 ins. diam., bears N. 47 $\frac{1}{2}$ ° W., 42 lks. dist., marked T 21 S R 8 E S 9 B T.
- Land, rolling and mountainous.
Soil, rocky; 4th rate.
Timber cedar and pinon.
Mountainous or timbered land 80.00 chs.

June 12, 1910.

June 13: At 7 h. 00 m.a.m. l.m. t. I set off 39° 00' on

Subdivisions of T. 21 S.; R. 8 E.

chains	the lat. arc; $23^{\circ} 12\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor of secs. 9, 10, 15 and 16.
	Thence I run
	East, on a random line bet. secs. 10 and 15
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line 12 lks. N. of the cor. of secs. 10, 11, 14 and 15.
	Thence I run
	N. $89^{\circ} 55'$ W., on a true line bet. secs. 10 and 15
	Over hilly land.
36.25	Wash, 10 lks. wide, course S. 10° E.
39.00	Wash, 10 lks. wide, course S. 20° E.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 10 on N. half and S 15 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base 2 ft. high N. of cor.
54.75	Base of mesa, bears NE. and SW.
	Thence asc. steep E. slope of mesa over series of ledges.
74.25	Top of mesa, 400 ft. above base, bears NE. and SW.
	Enter dense forest of cedar and pinon.
	Gradually desc.
80.02	Intersect cor of secs. 9, 10, 15 and 16.
	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon.
	Mountainous and timbered land 80.02 chs.

N. $0^{\circ} 02'$ W., bet. secs. 9 and 10.

Gradually desc. over mesa sloping NW. thru forest of cedar and pinon.

40:00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec cor. marked on brass cap $\frac{1}{4}$ S 9

Subdivisions of T. 21 S.; R. 8 E.

chains
 on W. half and S 10 on E. half; from which

A pinon, 6 ins. diam., bears N. $73\frac{1}{4}^{\circ}$ E., 17 lks. dist.; marked $\frac{1}{4}$ S 10 B T.

A pinon, 11 ins. diam., bears N. $81\frac{1}{2}^{\circ}$ W.; 66 lks. dist.; marked $\frac{1}{4}$ S 9 B T.

52.60 Wash, 10 lks. wide, 20 ft. deep, course NW.

75.00 Leave dense timber, bears NE. and SW.

77.90 Wash, 15 lks. wide, course NW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked on brass cap

T 21 S S 4 in NW.

R 8 E S 3 in NE

S 10 in SE. and

S 9 in SW. quadrant; from which

A pinon, 10 ins. diam. bears S. $34\frac{1}{2}^{\circ}$ E., 475 lks. dist., marked T 21 S R 8 E S 10 B T.

A pinon, 16 ins. diam. bears S. $52\frac{1}{4}^{\circ}$ W., 195 lks. dist., marked T 21 S R 8 E S 9 B T.

A Cedar, 8 ins. diam. bears N. $72\frac{1}{2}^{\circ}$ W., 111 lks. dist., marked T 21 S R 8 E S 4 B T.

No tree within limits in sec. 3.

And also raise a mound of stone, 2 ft. base 2 ft. high W. of cor.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, cedar and pinon.

Mountainous and timbered land 80.00 chs.

S. $89^{\circ} 55'$ E., on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

June 13: At this temp. $\frac{1}{4}$ sec. cor. I set off $23^{\circ} 12\frac{1}{2}'$ N. on the decl. arc; and at 11:30 a.m. observe the sun on the meridian; the resulting lat. is $39^{\circ} 01'$.

Subdivisions of T. 21 S.; R. 8 E.

chains	
80.00	Intersect N. and S. line 10 lks. S. of the cor. of secs. 2, 3, 10 and 11
	Thence I run
	N. 89° 59' W., on a true line bet. secs. 3 and 10.
	Over mountainous land.
1.00	Spur, projects S.
	Desc. 75 ft. to
6.00	Base of spur, bears N. and S.
8.00	Enter scattering cedar and pinon, bears N. and S.
23.40	Wash, 20 lks. wide, course NW.
	Ascend E. face of mesa over boulders.
35.50	Top of mesa, 75 ft. above wash, bears N. and S.
	Thence over land sloping NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 3 on N. half and S 10 on S. half; from which
	A pinon, 13 ins. diam. bears S. 66 $\frac{1}{2}$ ° E., 24 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 10 B.T.
	A pinon, 18 ins. diam. bears N. 73 $\frac{1}{2}$ ° W., 85 lks. dist., marked $\frac{1}{4}$ S 3 B.T.
52.40	Wash, course N.
54.00	Low ridge, bears N. and S.
62.00	Leave timber, bears N. and SW.
80.00	The cor. of secs. 3, 4, 9 and 10.
	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon.
	Mountainous and timbered land 80.00 chs.
	N. 0° 02' W., bet. secs. 3 and 4
	Over hilly land thru scattering cedar and pinon.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S. 4

Subdivisions of T. 21 S., R. 8 E.

chains on W. half and S 3 on E. half, and raise a mound of stone 2 ft. base 2 ft. high W. of cor. Pits impracticable.

65.00 Wash, 15 lks wide, course NE.

Molan Seep, a spring of good water, 2 ft. in diam., 3 ins. deep, bears E., 5 chs. dist.

81.70 Wash. 25 lks. wide, 5 ft. deep, course NW.

88.20 Same wash, course N.20° E.

89.40 Price wash, 20 lks. wide, 5 ft. deep, course E.; asc.

97.20 Low ridge, bears NE. and S.

102.18 Intersect N. bdy. of the Tp. 4.03 chs., N. 89° 41' W. of the standard cor. of secs. 33 and 34, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for C.C. of secs. 3 and 4, marked on brass cap

T. 20 S R 8 E S 33 C C S 34 in N. half, S 3 in SE., and S 4 in SW. quadrant; and raise a mound of stone, 3 ft. base 2 ft. high S. of cor.

Land, billy.

Soil, sandy loam and gravelly; 1st and 3rd rates.

Timber, a few scattering cedar and pinon.

June 13, 1910.

June 14: At 8h. 00 m.a.m. I set off 38° 56' on the lat. arc; 23° 16' N. on the decl. arc. and determine a meridian with the solar at the cor. of secs, 4, 5, 32 and 33 heretofore described. in S. Bdy. of Tp. Thence I run N. 0° 03' W., bet secs. 32 and 33

Over broken land

5.50 Wash, course W.

7.00 Enter scattering forest of cedar and pinon.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 4 sec. cor. marked on brass cap

Subdivisions of T. 21 S.; R. 8 E.

chains on W. half and S 33 on E. half; from which
 A cedar, 5 ins. diam. bears N. 73° E., 42 lks. dist.,
 marked $\frac{1}{4}$ S 33 B T.
 and raise a mound of stone 2 ft. base 1½ ft. high W. of
 cor.
 A few trees in sec. 32 but none suitable for bearing
 trees.

41.15 Wash, course W.; asc.
 42.75 Spur, projects W.; desc.
 45.20 Wash, course NW.; asc.
 64.00 Ridge, bears NW. and E.
 68.00 Desc. 35 ft. to
 70.00 Base of ridge, and leave cedar and pinon, bears E. and
 W.
 76.70 Wash, 20 lks. wide, 6 ft. deep, course E.
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground, for cor. of secs. 28, 29, 32 and 33, marked
 on brass cap
 T 21 S S 29 in NW.
 R 8 E S 28 in NE.
 S 33 in SE., and
 S 32 in SW. quadrant; dig pits 18 / 18 / 12 ins.
 in each sec., 5½ ft. dist.; and raise a mound of earth
 4 ft. base 2 ft. high W. of cor.
 Land, hilly.
 Soil, gravelly; 3 rd rate.
 Timber, cedar and pinon on 63.00 chs.

East, on a random line bet. secs. 28 and 33.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect N. and S. line at ^{point for} cor. of secs. 27, 28, 33
 and 34.
 Thence I run
 West on a true line bet. secs. 28 and 33

Subdivisions of T. 21 S.; R. 8 E.

chains	Over broken land, along N. side of wash.
12.00	Leave bottom, asc. land facing SE.
17.25	Spur, 75 ft. above wash, projects S.; descend
24.65	Wash, 30 lks. wide, 15 ft. deep, course S.
31.30	Wash, 50 lks. wide, 25 ft. deep, course S.; ascend
37.85	Ridge, bears N. and S.; descend
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 28 on N. half and S 33 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high N. of cor.
41.00	Wash, 40 lks. wide, course NE.
51.50	Same wash, 25 lks. wide, course SE.
58.85	Same wash, 20 lks. wide, course NE.
	Thence along N. side of wash.
80.04	The cor. of secs. 28, 29, 32 and 33. Land, hilly. Soil, gravelly; 3rd rate. No timber.
<hr/>	
	N. $0^{\circ} 03'$ W., bet. secs. 28 and 29
	Over rolling and hilly land.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 29 on W. half and S 28 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
52.00	Ridge, 50 ft. high. bears NW. and SE.; descend
53.25	Wash, 20 lks. wide, 12 ft. deep, course SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked on brass cap T 21 S S 20 in NW. R 8 E S 21 in NE. S 28 in SE., and

Subdivision of T. 21 S., R. 8 E.

chains	S 29 in SW. quadrant; and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable. Land, hilly and rolling. Soil, gravelly and clay; 3rd rate. No timber.
	East, on a random line bet. secs. 21 and 28
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at the cor. of secs. 21, 22, 27 and 28
	June 14: At this sec. cor. I set off 23° 15½' N. on the decl. arc; and at 12 h. Om M. l. m. t. observe the sun on the meridian; the resulting lat. is 38° 58'.
	Thence I run
	West, on a true line bet. secs. 21 and 28
	Over rolling and hilly land.
3.80	Wash, course SE.; ascend
17.50	Low ridge, bears N. and S.
38.00	Ridge, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 21 on N. half and S 28 on S. half; and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor. Pits impracticable.
68.50	Top of knoll, 50 ft. high.
77.00	Ridge, bears N. and S.
80.00	The cor. of secs. 20, 21, 28 and 29.
	Land, rolling and hilly.
	Soil, gravelly; 3rd rate.
	No timber.
	N. 0° 03' W., bet. secs. 20 and 21.
	Over level land.
10.00	Base of spur, bears E. and W.

Subdivision of T. 21 S., R. 8 E.

chains	Thence up steep ascent over huge boulders.
16.40	Spur, 125 ft. high, projects W. Desc. 70 ft. to
30.50	Wash, course SW. Ascend.
39.30	Top steep ascent, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 20 on W. half and S 21 on E. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
42.85	Wash, course SW.
46.50	Base of steep ascent, bears E. and W.
57.50	Top of mesa, 175 ft. above $\frac{1}{4}$ sec. cor. and 500 ft. above sec. cor., bears E. and W. Enter dense forest of cedar and pinon.
70.50	Spur, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 16; 17, 20 and 21, marked on brass cap T 21 S S 17 in NW. R 8 E S 16 in NE. S 21 in SE.; and S 20 in SW. quadrant; from which A cedar, 8 ins. diam. bears N. $17\frac{1}{2}^{\circ}$ E., 197 $\frac{1}{2}$ lks. dist., marked T 21 S R 8 E S 16 B T. A cedar, 6 ins. diam. bears S. $27\frac{1}{2}^{\circ}$ E., 138 lks. dist., marked T 21 S R 8 E S 21 B T. A pinon, 8 ins. diam. bears S. $9\frac{1}{4}^{\circ}$ W., 111 lks. dist., marked T 21 S R 8 E S 20 B T. A cedar, 5 ins. diam. bears N. $78\frac{1}{2}^{\circ}$ W., 242 lks. dist., marked T 21 S R 8 E S 17 B T.
	Land, mountainous, and level
	Soil, rocky; 4th rate.
	Timber, cedar and pinon.

Subdivision of T. 21 S., R. 8 E.

chains	Land mountainous or heavily timbered 80.00 chs
	East, on a random line bet. secs. 16 and 21
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect N. and S. line 4 lks. S of the cor of secs. 15, 16, 21 and 22.
	June 14, 1910
	June 15 : At 8 h. 00 m. a. m. 1. m. t. I set off $38^{\circ} 59'$ on the lat. arc; $23^{\circ} 19'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.
	Thence I run
	S. $89^{\circ} 58'$ W., on a true line bet. secs. 16 and 21.
	Over mountainous land
7.00	Base of ridge, bears N. and S. Thence up steep E. slope.
15.35	Top of ridge, 225 ft. above base, bears NW. and SE. Thence over land sloping S.
20.25	Spur, projects SW.; descend
25.30	Small wash, descends S. ascend.
31.00	Spur, projects SW. Desc. 100 ft. to
36.15	Wash, course S.; asc.
39.97	Cor point falls on steep slope where it is impossible to set cor, at
40.80	Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for W. C. to the $\frac{1}{4}$ sec. cor. marked on brass cap T 21 S R 8 E S 16 on N. half, and S 21 on S. half with W C $\frac{1}{4}$. and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable. Asc. steep SE. slope of mesa.
47.30	Top of ascent and mesa, 175 ft. above $\frac{1}{4}$ sec. cor. bears NE. and S. Enter dense forest of cedar and pinon Gradually descend.

Subdivision of T. 21 S.; R. 8 E.

chains

- 79.94 The cor. of secs. 16, 17, 20 and 21.
Land, mountainous.
Soil, rocky and adobe; 4th rate.
Timber, cedar and pinon
Land mountainous or heavily timbered 79.94 chs.
-
- N. 0° 03' W., bet. secs. 16 and 17
Over rolling mesa top thru dense forest of cedar and pinon
Gradually desc.
- 30.00 Wash, 5 lks. wide, course NW.
- 35.50 Small wash, 10 lks. wide, course S. 45° W.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 17 on W. half and S 16 on E. half; from which
A cedar, 10 ins. diam. bears N. 16 $\frac{1}{2}$ ° W., 211 lks. dist., marked $\frac{1}{4}$ S 17 B T.
A pinon, 13 ins. diam. bears S. 51 $\frac{1}{2}$ ° E., 270 lks. dist., marked $\frac{1}{4}$ S 16 B T.
- 41.00 Low ridge, bears E. and W.
- 55.00 Wash, 10 lks. wide, course N. 80° E.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked on brass cap
T 21 S S 8 in NW.
R 8 E S 9 in NE.
S 16 in SE., and
S 17 in SW. quadrant; from which
A pinon, 5 ins. diam. bears N. 30 $\frac{1}{2}$ ° E., 203 lks. dist., marked T 21 S R 8 E S 9 B T.
A pinon, 6 ins. diam. bears S 45° E., 187 $\frac{1}{2}$ lks. dist., marked T 21 S R 8 E S 16 B T.
A pinon, 10 ins. diam. bears S. 79° W., 123 lks. dist., marked T 21 S R 8 E S 17 B T.

Subdivision of T. 21 S., R. 8 E.

chains A pinon, 12 ins. diam. bears N. 77° W., 64 lks.
 dist., marked T. 21 S. R. 8 E. S. 8 B.T.
 Land, rolling
 Soil, rocky; 4th rate.
 Timber, cedar and pinon.
 Timbered land 80.00 chs.

40.00 N. 89° 58' E., on a random line bet. secs. 9 and 16
 Set temp. $\frac{1}{4}$ sec. cor.
 79.99 Intersect N. and S. line 2 lks. N. of the cor. of secs.
 9, 10, 15 and 16.
 Thence I run
 S. 89° 59' W., on a true line bet. secs. 9 and 16
 Over mountainous land, descending thru dense forest of
 cedar and pinon.
 25.50 Wash, 15 lks. wide, course N. 20° W.
 39.99 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 9
 on N. half and S. 16 on S. half; from which
 A pinon, 8 ins. diam. bears S. 15 $\frac{1}{2}$ ° E., 60 $\frac{1}{2}$ lks.
 dist., marked $\frac{1}{4}$ S 16 B.T.
 A pinon, 12 ins. diam. bears N. 27 $\frac{1}{2}$ ° W. 19 lks.
 dist., marked $\frac{1}{4}$ S 9 B.T.
 Leave dense timber, bears N. and S.
 Descend 75 ft. to
 63.80 Wash, 10 lks. wide, course NE.
 79.99 The cor. of secs. 8, 9, 16 and 17.
 Land, rolling.
 Soil, rocky; 4th rate.
 Timber, cedar and pinon.
 Timbered land 79.99 chs.
 June 15 : At this sec. cor I set off 23° 18 $\frac{1}{2}$ ' N. on the
 decl. arc; and at 12 h. 00m M.l.m.t. observe the sun on
 the meridian; the resulting lat. is 39° 00'.

Subdivision of T. 21 S.; R. 8 E.

chains N. $0^{\circ} 03'$ W., bet. secs. 8 and 9.
 Over hilly land, thru dense forest of cedar and pinon
 Ascend 25 ft. to
 1.00 Thence over land sloping NW.
 32.90 Wash, 25 lks. wide, course NE.; leave timber, thence
 over land facing E.
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{2}$ S 8
 on W. half and S 9 on E. half; dig pits 18 / 18 / 12 ins.
 N. and S. of post 3 ft. dist.; and raise a mound of
 earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 42.50 Wash, course E.
 49.40 Wash, course E.
 58.95 Wash, course E.
 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground, for cor. of secs. 4, 5, 8 and 9, marked on
 brass cap
 T 21 S S 5 in NW.
 R 8 E S 4 in NE.
 S 9 in SE.; and
 S 8 in SW. quadrant; dig pits 18 / 18 / 12 ins. in
 each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth
 4 ft. base, 2 ft. high W. of cor.
 Land, hilly.
 Soil, rocky and clay; 4th rate.
 Timber, cedar and pinon on 32.90 chs.

June 15, 1910.

June 16: At 7 h. 00 m.a.m. I set off $39^{\circ} 01'$ on
 the lat. arc; $23^{\circ} 21\frac{1}{2}'$ N. on the decl. arc; and deter-
 mine a meridian with the solar at the cor. of secs.
 4, 5, 8 and 9.
 Thence I run
 N. $39^{\circ} 59'$ E., on a random line bet. secs. 4 and 9.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.

Subdivision of T. 21 S. ; R. 8 E.

chains	
79.97	Intersect N. and S. line 2 lks. S. of the cor. of secs. 3, 4, 9 and 10.
	Thence I run
	S. $89^{\circ} 58'$ W., bet. secs. 4 and 9, on true line
	Over billy land.
9.25	Wash, course N.; ascend
13.00	Clay ridge, bears N. and S.
20.00	On N. point of ridge.
21.48	Wash, course N.; ascend
29.00	S. end of flat cedar ridge, bears N. and S.
39.98	Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 4 on N. half and S 9 on S. half; from which
	A cedar, 6 ins. diam. bears S. 78° W., 58 lks. dist., marked $\frac{1}{4}$ S 9 B T.
	and also raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. No other bearing trees within limits.
44.00	Wash, 25 lks. wide, course N.
52.20	Wash, course NE.
72.00	Wash, course NE.
79.97	The cor. of secs. 4, 5, 8 and 9.
	Land, billy.
	Soil, clay and rocky; 4th rate.
	Timber, few scattering cedar and pinon.
	$N. 0^{\circ} 03'$ W., bet. secs. 4 and 5
	Over rolling land.
5.50	Enter huge boulders, bears N. 15° E. and S. 15° W.
16.00	Base of mesa, bears N. 15° E. and S. 15° W.
	Thence asc. along E. face.
23.00	Top of ascent on E face of mesa, 75 ft. above base.
	Desc. 75 ft. to
32.00	Foot of mesa, bears N. 30° W. and SE.
	Gradually descend.

Subdivision of T. 21 S.; R. 8 E.

chains

- 38.60 Wash, course N: 5° E.
- 40.00 Set an iron post, 3 ft. long, lin. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor marked on brass cap $\frac{1}{4}$ S 5 on W. half and S 4 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high W. of cor.
- 46.15 Same wash, course N. 20° W.
- 48.00 Same wash, at bend, course N 20° W.
- 49.00 Same wash, course NE.
- 58.40 Wash, 20 lks. wide, 15 ft. deep, course E.
Gradually ascend.
- 68.00 Base of mesa, bears N 20° E. and SW.
Asc. along E. face, 100 ft. to
- 80.00 Top of ascent on E. face of mesa, desc. NE. slope.
- 85.00 Foot of mesa, 150 ft. below top, bears N. 80° W. and SE.
- 89.60 Price wash, 15 lks. wide, 10 ft. deep, course E.
Thence over nearly level land
- 102.51 Intersect N. bdy. of the Tp. 3.10 chs. S. 87° 35' W. of the standard cor of secs. 32 and 33 heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground, for C C of secs. 4 and 5, marked on brass cap
T 20 S R 8 E S 32 C C S 33 on N. half,
S 4 in SW., and
S 5 in SW. quadrant; dig pits 24 / 18 / 12 ins. crosswise on each line, E. and W. 3 ft., and S. of post 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high S. of cor.
Land, rolling and mountainous.
Soil, clay and some sandy loam. 3rd and 1st rates.
No timber.
Mountainous land 33.00 chs.
June: 15 : At this Cor I set off 23° 21' N. on the decl.

Subdivision of T 21 S., R. 8 E.

chains

arc; and at 12 h. 00 m. l.m.t. observe the sun on the meridian; the resulting lat. is $39^{\circ}02'$.

From the cor. of secs. 5, 6, 31 and 32 on the S. bdy.

of the Tp. heretofore described

I run

N. $0^{\circ}03'$ W., bet. secs. 31 and 32.

Over rolling land.

35.00 Enter mountainous land, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 31 on W. half and S 32 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, 1 ft. high W. of cor.

40.55 Wash, 15 lks. wide, course N. 10° E.

43.75 Wash, 10 lks. wide, course E.

48.00 Base of high ridge, bears E. and W.

Thence up steep ascent over series of ledges.

50.50 Top of ascent and ridge, 200 ft. above base, bears E.

and W.

Enter scattering forest of cedar and pinon.

Descend

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked on brass cap

T 21 S S 30 in NW.

R 8 E S 29 in NE.

S 32 in SE., and

S 31 in SW. quadrant; from which

A cedar, 10 ins. diam. bears N. $10\frac{1}{2}^{\circ}$ W., 162 lks.

dist., marked T 21 S R 8 E S 30 B.T.

and also raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high

W. of cor.

Land, rolling and mountainous.

Soil, sandy and rocky; 2nd and 4th rates.

Subdivision of T. 21 S.; R. 8 E.

chains

Timber, cedar and pinon.

Mountainous or timbered land 80.00 chs.

June 16, 1910

June 17: At 7 h. 00 m.a.m.l.m.t. I set off $38^{\circ} 57\frac{1}{2}'$ on the lat. arc; $23^{\circ} 24' N.$ on the decl. arc; and determine a meridian with the solar at the cor of secs. 29, 30, 31 and 32.

Thence I run

East, on a random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.91 Intersect N. and S. line at the cor of secs. 28, 29 32 and 33.

Thence I run

West, on a true line bet. secs. 29 and 32

Over rolling land along channel of wash.

6.60 Wash, 20 lks wide, course SE.

10.90 Wash, 10 lks wide, course N.

16.00 Wash, 20 lks wide, course NE

38.00 Leave wash bottom, gradually asc. over rocky land.

39.95 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 29 on N. half and S 32 on S. half ; dig pits 18/ 18 / 18 ins E. and W. of post 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high N. of cor.

44.00 Begin ascent over mountainous land facing NE.

67.00 Enter scattering forest of cedar and pinon.

67.50 Top of ascent, 400 ft. above $\frac{1}{4}$ sec. cor., bears NW. and SE.

Thence gradually desc. over land sloping NW.

79.91 The cor. of secs. 29, 30, 31 and 32.

Land, rolling and mountainous.

Soil, sandy loam and rocky; 1st and 4th rates.

Timber, some cedar and pinon.

Mountainous and timbered land 36.00 chs.

Subdivision of T. 21 S.; R. 8 E.

- chains West, on a random line bet. secs. 30 and 31
- 40.00 Set temp $\frac{1}{4}$ sec. cor.
- 77.59 Intersect the W. bdy. of the Tp. 2' lks N. of the cor. of secs. 25, 30, 31 and 36 heretofore described.
- Thence I run
- N. $89^{\circ} 59'$ E., on a true line bet. secs. 30 and 31
- Over rolling and hilly land thru forest of cedar and pinon
- 3.85 Wash, course SE.
- 5.05 Wash, course S.
- 14.40 Wash, course S. 20° W.
- Gradually asc. over land sloping NW.
- 37.59 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 30 on N. half and S 31 on S. half; from which
- A pinon, 8 ins. diam. bears N. $43\frac{1}{2}^{\circ}$ E., 54 lks. dist., marked $\frac{1}{4}$ S 30 B T.
- A pinon 10 ins. diam. bears S. $27\frac{1}{2}^{\circ}$ W., 133 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 31 B T.
- 44.00 Top of mesa, bears N. and S.
- Descend 175 ft. over broken land to
- 77.59 The cor. of secs. 29, 30, 31 and 32.
- Land, mountainous.
- Soil, rocky; 4th rate.
- Timber, cedar and pinon.
- Land mountainous and heavily timbered 77.59 chs.
- June 17: At this sec. cor I set off $23^{\circ} 23\frac{1}{2}'$ N. on the decl. arc; and at 12 h. 00 m.l.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 57\frac{1}{2}'$.
-
- N. $0^{\circ} 03'$ W., bet. secs. 29 and 30.
- Gradually asc. over mountainous land.
- 7.75 Descend 30 ft. to
- 8.95 Wash, 15 lks. wide, course E.
- Thence ascend steep land facing SE.
- 15.00 Top of steep ascent, bears NE. and SW.

Subdivision of T. 21 S. ; R 8 E.

- chains Continue to ascend.
- 34.25 Ridge, 150 ft. above wash, bears E. and W.
Descend 75 ft. to
- 39.35 Wash, course E.
Begin steep ascent.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 30 on W. half and S 29 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
- 41.75 Spur, 50 ft. above $\frac{1}{4}$ sec. cor., projects SE.
Thence over land facing E.
- 45.50 Spur, projects NE.
Descend abruptly 125 ft. to
- 49.70 Wash, course E.
Thence up steep S. slope of ridge over huge boulders.
- 56.50 High rocky ridge, 200 ft. above last wash, bears E. and W.; descend
- 66.00 Enter scattering cedar and pinon.
- 80.00 200 ft. below ridge
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked on brass cap
T 21 S S 19 in NW.
R 8 E S 20 in NE.
S 29 in SE., and
S 30 in SW., quadrant; From which
A cedar, 5 ins. diam. bears N. 85° E., 50 lks. dist., marked T 21 S R 8 E S 20 B T.
A pinon 5 ins. diam. bears S, 36° E., 94 lks. dist., marked T 21 S R 8 E S 29 B T.
A cedar 24 ins. diam. bears S $73\frac{1}{2}^{\circ}$ W., 58 $\frac{1}{2}$ lks. dist., marked T 21 S R 8 E S 30 B T.
A cedar, 7 ins. diam. bears N $3\frac{1}{2}^{\circ}$ W., 103 lks. dist., marked T 21 S R 8 E S 19 B T

Subdivisions of T 21 S; R. 8 E.

chains	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon.
	Land mountainous and timbered 80.00 chs.
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	East, on a random line bet. secs. 20 and 29
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line 2 lks. S. of the cor of sec. 20, 21, 28 and 29.
	Thence I run
	S $89^{\circ} 59'$ W., on a true line bet. secs. 20 and 29
	Over rolling land.
11.00	Base of spur, bears NW. and SE.; ascend
17.50	spur, projects SE.
	Thence over land facing almost S.
26.60	Top of ascent and ridge, bears N. and S.
36.00	S. point of spur, projects S.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 20 on N. half and S 29 on S. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
	Desc. 75 ft. to
42.00	Hollow, drains S.
	Ascend 60 ft. to
46.00	Ridge, bears N. and S.; descend
51.20	Wash, 100 ft. below ridge, course SE.
	Thence ascend land facing NE.
73.40	Top of ascent and enter forest of cedar and pinon, bears N. and S.
79.90	The cor. of secs. 19, 20, 29 and 30.
	Land, mountainous and rolling.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon on 6.60 chs.
	Mountainous land 64.00 chs.

Subdivision of T. 21 S.; R. 18 E.

chains	June 18: At 7 h. 01 m. a. m. l. m. t. Inset off $38^{\circ} 58'$ on the lat. arc; $23^{\circ} 25\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30.
	Thence I run
	S. $89^{\circ} 59'$ W. on a random line bet. secs 19 and 30
40.00	Set temp. $\frac{1}{4}$ sec. cor.
77.52	Intersect W. bdy. of the Tp. 2 lks. N. of the cor. of secs. 19, 24, 25 and 30 heretofore described.
	Thence I run
	N. $89^{\circ} 58'$ E., on a true line bet. secs. 19 and 30
	Over mountainous land
	Descend steep E. face of mesa.
3.55	Base of mesa, 60 ft. below sec. cor.; bears N. and S.
	Thence over rolling land thru scattering forest of cedar and pinon.
37.52	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground; for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S. 19 on N. half and S 30 on S. half; from which
	A cedar, 11 ins. diam. bears N. $0^{\circ} 30'$ W., 158 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 19 B T.
	A cedar, 12 ins. diam. bears S. $32\frac{3}{4}^{\circ}$ W.; 242 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 30 B T.
44.50	Enter dense timber, bears N. and S.; ascend
62.92	Top of ascent, bears N. and S.; descend
77.52	125 ft. below top of ascent.
	The cor of secs. 19, 20, 29 and 30.
	Land, mountainous and rolling.
	Soil, rocky and clay; 3rd and 4th rates.
	Timber, cedar and pinon.
	Mountainous or timbered land 77.52 chs.
	N. $0^{\circ} 03'$ W., bet. secs. 19 and 20
	Over mountainous land thru forest of cedar and pinon.
37.40	Wash, course E.

Subdivision of T. 21 S., R. 8 E.

chains	
11.00	Wash, course E. Enter huge boulders, ascend over land facing SE.
18.60	Ridge, 75 ft. above wash, bears N. 80° E. and W. Descend 60 ft. to
21.80	Wash, 25 lks wide, course E. Thence over rocky land sloping about S. 10° E.
34.00	Top of ascent and mesa, 150 ft. above wash, bears NE. and S. 10° W. Desc. over land facing NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor marked on brass cap $\frac{1}{4}$ S 19 on W. half and S 20 on E. half; from which A pinon, 13 ins. diam. bears S. 89 $\frac{1}{2}$ ° E., 108 lks. dist., marked $\frac{1}{4}$ S 20 B T. A pinon, 12 ins. diam. bears S. 15 $\frac{1}{2}$ ° W., 6.7 lks. dist., marked $\frac{1}{4}$ S 19 B T.
59.10	Wash, course SW. Leave timber, bears NE. and SW. Thence over open rolling land.
70.00	Wash, course SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor of secs. 17, 18, 19 and 20, marked on brass cap T 21 S S 18 in NW. R 8 E S. 17 in NE. S 20 in SE., and S 19 in SW. quadrant; from which A cedar, 8 ins. diam. bears N. 19° W., 49 lks. dist., marked T 21 S R 8 E S 18 B T. dig pits, 18 / 18 / 12 ins. SE., SW. and NE. of post, 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high W. of cor. Land, mountainous and rolling. Soil, rocky; 4 th rate.

Subdivision of T. 1 S.; R. 8 E.

- chains
 Timber, cedar and pinon.
 Mountainous or timbered land 80.00 cha.
-
- N. $89^{\circ} 59'$ E., on a random line bet. secs. 17 and 20
 40.00 Set temp. & sec. cor.
 75.00 Intersect N. and S. line 2 lks. N. of the cor. of secs.
 16, 17, 20 and 21
 Thence I run
 West, on a true line bet. secs. 17 and 20
 Over rolling land thru forest of cedar and pinon
 18.05 Wash, course S. $55^{\circ} 7'$.
 Leave cedar and pinon.
 25.50 Hit ridge, bears N. and S.
 39.05 Set an iron post, 3 ft. long, 1 in. in dia., 25 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 17
 on N. half and S 20 on S. half; dig pits 18/18/12 ins.
 E. and W. of post 3 ft. dist.; and raise a mound of
 earth 24 ft. base, 14 ft. high N. of cor.
 35.15 Wash, course SW.
 35.35 Wash, course S.
 39.90 The cor. of secs. 17, 18, 19 and 20.
 Land, rolling
 Soil, sandy loam and gravelly; 1st and 3rd rates.
 Timber, cedar and pinon. on 15.95 cha.
 June 18: At this sec. cor. I set off $23^{\circ} 24'$ N. on the
 decl. arc; and at 12 h. 01 m. p. m. l. m. t. observe the sun
 on the meridian; the resulting lat. is $38^{\circ} 59'$.
-
- S. $60^{\circ} 58'$ W., on a random line bet. secs. 18 and 19.
 10.00 Set temp. & sec. cor.
 37.44 Intersect the W. bdy. of the T. 5 lks. S. of the cor.
 of secs. 16, 18, 19 and 21 heretofore described.
 Thence I run
 East, on a true line bet. secs. 18 and 19.
 Over mesa top thru dense forest of cedar and pinon.

Subdivisions of T. 21 S., R. 8 E.

chains	
5.90	E. edge of mesa, bears N. and S. Descend very steep E. slope of mesa over series of ledges Leave forest of cedar and pinon.
14.00	Base of mesa, 325 ft. below top, bears NE. and S. 80° W. Thence over rolling land sloping S.
37.44	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 18 on N. half and S 19 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
65.95	Wash, course S.
77.44	The cor of secs. 17, 18, 19 and 20. Land, rolling and mountainous. Soil; clay and rocky; 4th rate. Timber, cedar and pinon on 5.90 chs. Mountainous land 14.00 chs:
	N. 0° 03' W.; bet. secs. 17 and 18 Over rolling land sloping S.
10.60	Wash, course S. 15° E.
30.25	Wash, course S. 15° E.
40.00	On small clay hill Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 18 on W. half and S 17 on E. half; dig pits 18 / 18 / 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor. Base of mesa bears W. 2 chs. Enter hilly land
50.75	Top of knoll, bears W. 1 ch.
52.00	Hollow, drains SE.; ascend
53.50	Ridge, bears SE and W. 1 ch. Descend 70 ft. to
57.10	Wash, course E.

Subdivision of T. 21 S.; R. 8 E.

- chains
- 52.00 Base of mesa, bears NE. and S. 15° W.
Thence up steep SE. face of mesa. over small ledges.
- 71.50 Top of mesa, 225 ft. above base, bears NE. and S. 20° W.
Thence gradually descend thru scattering cedar and pinon
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in
the ground for cor. of secs. 7, 8, 17 and 18, marked
on brass cap
- T 21 S S 7 in NW.
R 8 E S 8 in NE.
S 17 in SE., and
S 18 in SW. quadrant; from which
- A cedar, 6 ins. diam. bears N. $29\frac{1}{2}^{\circ}$ E., 47 $\frac{1}{2}$ lks.
dist., marked T 21 S R 8 E S 8 B T.
- A cedar, 14 ins. diam. bears S. 6° E., 102 lks.
dist., marked T 21 S R 8 E S 17 B T.
- A cedar, 6 ins. diam. bears S. $28\frac{1}{2}^{\circ}$ W., 34 lks.
dist., marked T 21 S R 8 E S 18 B T.
- A cedar 11 ins. diam. bears N. $47\frac{1}{2}^{\circ}$ W., 215 lks.
dist., marked T 21 S r 8 E S 7 B T.

Land, rolling and mountainous.

Soil, clay and rocky; 3rd and 4th rates.

Timber, few scattering cedar and pinon on last 8.00 chs.

Mountainous land 40.00 chs. June 18, 1910

June 19: At 7 h. 01 m.a.m.l.m.t. I set off $39^{\circ} 00'$ on
the lat. arc; $23^{\circ} 25'$ N. on the decl. arc; and deter-
mine a meridian with the solar at the cor. of secs.
7, 8, 17 and 18

Thence I run

East, on a random line bet. secs 8 and 17

40.00 Set temp. & c.c. cor.

79.86 Intersect N. and S. line 7 lks. N. of the cor. of secs.
8, 9, 16 and 17

Thence I run

Subdivision of T. 21 S.; R. 8 E.

chains	N. 89° 57' W., on a true line bet. secs. 8 and 17 Over rolling land thru forest of cedar and pinon
13.90	Wash, course N. 10° E.
23.20	Leave dense cedar and pinon, bears N. 15° E. and S. 15° W. Wash, course NE.
39.93	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 8 on N. half and S 17 on S. half; dig pits 18 / 18 / 12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft high N. of cor.
66.00	Base of mesa, bears NE. and SW. Thence up steep E. face of mesa
73.00	Top of mesa, 225 ft. above base, bears NE. and SW. Desc. over mesa top thru scatterin cedar and pinon
79.86	The cor of secs. 7, 8, 17 and 18 Land rolling and mountainous. Soil, clay and rocky; 4th rate. Timber, cedar and pinon. Mountainous or timbered land (79. 86 chs.
<hr/>	
40.00	West, on a random line bet. secs. 7 and 18 Set temp. $\frac{1}{4}$ sec. cor.
77.39	Intersect W. bdy of the Tp: 2 lks. N. of the cor of secs 7, 12, 13 and 18 heretofore described. Thence I run N. 89° 59' E., on a true line bet. secs. 7 and 18 Over broken mesa top sloping NW.; thru dense forest of cedar and pinon. ascend.
2.50	Low ridge, bears N and S.
10.25	Wash, drains, NW.
14.40	Ridge, bears NW and SE.
20.15	Wash, drains, NW.
22.90	Ridge, bears, N and S.
25.60	Draw, course, N.
37.00	25 ft. ledge, and begin steep descent into gulch bears N and S

Subdivisions of T. 21 S.; R. 8 E.

chains

- 37.39 On E. slope of gulch.
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 7 on N. half and S 18 on S. half; from which
A pinon, 8 ins. diam. bears N. $61\frac{1}{2}^{\circ}$ E., 90 lks. dist., marked $\frac{1}{4}$ S 7 B T
A cedar, 11 ins. diam. bears S. $36\frac{1}{2}^{\circ}$ E. 164 lks. dist., marked S 18 B T
- 38.85 Bottom of gulch, 65 ft. deep 20 lks. wide, course N
Ascend E. side of gulch.
- 40.65 20 ft. ledge, and top of ascent 65 ft. above wash,
bears N and S.
- 47.20 Begin descent of 60 ft.
- 49.65 Wash, course N.
- 51.80 Wash, and bottom of gulch, course NW.
- 55.80 Wash, course S 80 W.; ascend 75 ft.
- 59.35 25 ft. ledge, and top of ascent, bears N and S.
- 72.40 Descend .60 ft.
- 75.00 Wash, drains N 15° E.
- 77.39 The cor. of secs. 7, 8, 17 and 18.
Land, mountainous.
Soil, rocky 4th. rate.
Timber, cedar and pinon.
Land mountainous and heavily timbered 77.39 chs.
-
- N. $0^{\circ}03'$ W., bet. secs. 7 and 8.
Over mountainous land, thru forest of cedar and pinon. gently descend.
- 4.10 Small wash, drains N 20° W.
- 9.95 Wash, course NE.; ascend 75 ft. over land facing SE.
- 18.00 Top of ascent bears, NE and SE.
Thence gently descend over land sloping NW,
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 7

Subdivisions of T. 21 S., R 8E.

chains

on W half and S 8 on E half; from which

A cedar 6 ins. diam. bears S $63\frac{1}{2}^{\circ}$ E., 117 lks.dist., marked $\frac{1}{4}$ S 8 B TA cedar 5 ins. in diam. bears N $34\frac{1}{2}^{\circ}$ W., 99 lks.dist. marked $\frac{1}{4}$ S 7 B T

41.25 Wash, course NW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5, 6, 7 and 8, marked on brass cap

T 21 S S 6 in NW

R 8 E S 5 in NE

S 8 in SE

S 7 in SW, quadrant; from which

A pinon 14 ins. in diam. bears S $57\frac{1}{2}^{\circ}$ W 247 lks.dist.; marked T 21 S R 8 E S 7 B T., and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high W of cor. no other trees within limits in remaining secs.

Land, mountainous.

Soil, rocky and gravelly; 3rd and 4th rates.

Timber, cedar & pinon.

Land mountainous and heavily timbered 80.00 chs.

Good grazing.

S $89^{\circ} 57'$ E on random line bet. secs. 5 and 8.40.00 Set temp. $\frac{1}{4}$ sec, cor.

79.85 Intersect N and S line 7 lks. S of the cor. of secs. 4, 5, 8 and 9.

Thence I run

West on true line bet. secs. 5 and 8.

Over mountainous land

4.00 Base of mesa, bears N and S

Thence up steep E. slope of mesa, over small ledges.

13.50 Top of mesa 350 ft. above base, bears N 20° E & S.W.

13.75 Top of peak, S 20 lks.

Subdivisions of T 21 S, R 8 E.

chains	
	Desc 100 ft. over W. slope of peak.
16.50	Base of knoll, bears N and S. Thence gently desc. land sloping W.
28.10	Wash, drains N 80° W.
31.18	Wash, drains N. ascend.
36.50	Ridge, bears N. and S. desc.
39.92½	Set an iron post, 3 ft. long, 1 in in dia. 26 ins. in the ground for the ¼ sec. cor. marked on brass cap ¼ S 5 on N half, S 5 on S half; raise a mound of stone 2 ft. base 1½ ft. high N of the cor. Continue to desc.
44.60	Gulch, course N. asc., 75 ft. to
47.00	Thence over level land
51.42	Wash, drains N 10° W., asc. 65 ft. to
55.80	S end of spur, projects N. desc. 50 ft. to
60.00	Base of spur, bears N. and S.E.
76.50	Wash, drains N. asc.
79.85	The cor of secs. 5, 6, 7 & 8. Land, mountainous, and level. Soil, Rocky and clay; 3 th rate. Timber, few scattering cedars. Mountainous land, 68.43 chs.

June 19, 1910

June 20: At 7 h. 01 m. a.m. I set of 39° 00' $\frac{3}{4}$ " on the lat. arc; 23° 27' $\frac{1}{4}$ " N. on the decl. arc. and determine a meridian with the solar at the cor of secs. 5, 6, 7, & 8 heretofore described.

Knowing there will be a C.C. on W. bdy. of sec. 6, I run West on true line bet secs. 6 & 7.

Over top of broken mesa sloping N. W., thru scattering cedars and pinon.

4.00	Desc. 70 ft. to
8.05	Wash in gulch, drains N.
10.25	Top W. side of gulch, bears N and S.
23.20	Draw, course N. W.

SUBDIVISION OF T. 21 S., R. 8 E.

Chains	
30.92	Ledge, 35 ft. high, bears N. and S. Descend abruptly 75 ft. to
33.15	Wash in bottom of gulch, drains N. Ascend 75 ft.
34.60	Ledge, 60 ft. high, bears N. and S.
34.75	Top of W. side of gulch, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 6 on N. half, and S 7 on S. half; from which A pinon, 13 ins. diam., bears S. $45\frac{1}{2}^{\circ}$ W., $51\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 7 B T A cedar, 10' ins. diam., bears N. $6^{\circ}51'$ W., 32 lks. dist., marked $\frac{1}{4}$ S 6 B T
45.45	Small wash, near head, drains NE. Leave timber, bears N. and SW.
48.50	Ridge, bears N. and S.
59.00	Descend 50 ft. into wash.
61.30	Wash, 20 lks. wide, course NE. Ascend 50 ft.
63.50	Top of W. side of wash, bears N. and S.
72.60	Price Wash, 50 ft. deep, 25 lks. wide, course NE. Note: An alkali seep, bears up wash 2 chs.
77.29	Intersect W. bdy. of Tp., 12.90 chs. South of the cor. of secs. 1-6-7 and 13 heretofore described. Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for closing cor. of secs. 6 and 7, marked on brass cap T 21 S in N half, S 6 in NE. S 7 R 8 E in SE. and S 1 C C S 12 R 7 E in W. half; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable. I destroy all marks on old cor. pertaining to secs. 6 & 7. Land, mountainous. Soil, rocky 3rd and 4th rates. Timber, cedar and pinon on 45.45 chs.

SUBDIVISION OF T. 21 S., R 8 E.

Chains

Land, mountainous or heavily timbered on 77.29 chs.

N. 0° 03' W., bet. secs. 5 and 6

Over mountainous land through scattering cedars and pinon.

- 11.40 Wash, course NE.
- 38.85 Hollow, 75 ft. deep, course W.; ascend.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 6 on W. half, and S 5 on E. half, and raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 40.20 Ledge, 25 ft. high, bears E. and NW.
- 40.40 Top of spur, projects W.
Descend 75 ft. over NE. slope.
- 43.00 Hollow, course NW., ascend 75 ft.
- 47.40 Top of ascent, bears E. and SW.
Descend steep N. slope.
- 60.03 Price Wash, in 150 ft. hollow, course E.
Thence ascend along broken land facing SE.
- 78.60 Top of mesa and enter dense timber, bears NE. and SW.
Thence over top gentle slope to NW.
- 89.35 Intersect 4th St. Par. South 2.22 chs. S. 85° 51' W. of the standard cor. of secs. 31 and 32, heretofore described.
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for closing cor. of secs. 5 and 6, marked on brass cap T 20 S R 8 E S 31 C C S 32 on W half,
S 5 in SE., and
S 6 in SW. quadrant; from which
A cedar, 7 ins. diam., bears S. 79 $\frac{1}{2}$ ° E., 82 lks. dist.,
marked C C T 21 S R 8 E S 5 E T
No other bearing trees within limits; raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
Land, mountainous.
Soil, rocky; 4th rate.

Timber, Cedar and pinon on 99.36 chs.

Land mountainous or heavily timbered 99.36 chs.

Sky overcast, latitude observation impossible.

6

General Description of T. 21 S., R. 8 E.

This township contains broken mountainous, hilly, and rolling lands, and consists of four distinct mesa's or benches of different levels, the highest being in the NW. corner (secs. 5, 6, 7, 8 & 13) of the tp. and the lowest in the SE. corner of the tp. All have a south-westerly and north easterly trend.

Rich sandy loam soil, covered with an abundant growth of Sand grass, exist along the Salt wash, in secs. 24, 25, 35 and 36, and loose sandy soil is found on the bench thru parts of secs. 12, 13, 23, 24, 26 and 27. The remaining portion is chiefly rocky, adobe and gravelly, 3 rd. and 4 th. rates.

Forests of scrub cedar and pinon extend along the center of the tp. from the SW. corner To the NE. cor. of the tp., and on the mesa in the NW. portion.

The N. half of the township drains N. into the Price wash and the remaining drains SE. into Salt wash. No water with the exception of a small alkali seep in secs. 3 and 12. was found in the township.

The ledges are of a sandstone formation.

There are no settlers in the township.

There is no mineral.

Andrew Nelson

U.S. Deputy Surveyor.

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W. Miller and Andrew Nelson, United States Deputy Surveyors, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Subdivisions of T21S, R8E of the S.L.B. & M., Utah, showing the respective capacities in which they acted:

- Howard W. Miller , Chairman.
- Fred Wright , Chainman.
- Ray Bryan , Moundman.
- , Moundman.
- Edward Jones , Axman.
- , Axman.
- Edward Jones , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W. Miller and Andrew Nelson, United States Deputy Surveyors in surveying all those parts or portions of the Subdivisions of T21S, R8E

..... of the Salt Lake Base meridian, state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

- General for Utah
- Howard W. Miller , Chairman.
 - Fred Wright , Chainman.
 - Ray Bryan , Moundman.
 - , Moundman.
 - Edward Jones , Axman.
 - , Axman.
 - Edward Jones , Flagman.

Subscribed and sworn to before me this 20th day of June, 1900

Andrew Nelson
U.S. Deputy Surveyor.



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew Nelson, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivisional lines of Township 21 South, Range 8 East

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Andrew Nelson
United States Deputy Surveyor.

Subscribed by said Andrew Nelson, and sworn to before me this 30 day of December, 1910

Thomas Hull
U.S. Surveyor-General



APPROVAL.

for Utah.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1911

The foregoing field notes of the survey of the Subdivisional lines of Township 21 South, Range 8 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller and Andrew Nelson under their contract No. 316, dated January 15, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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Page

W. S. B.
M. S. B.

Book "F."

BOOK A-369

FILED
JAN 17 1911

FIELD NOTES

OF THE SURVEY OF THE

W. S. B.

East, South and the reticement
of the fractional North boundary
T. 22 S., R. 7 E

Of the Salt Lake Base and Meridian,

U T A H

AS SURVEYED BY

Howard W. Miller & Andrew Nelson, United States Deputy Surveyor, S.

Under ^{their} ~~its~~ Contract No. 316, dated Jan 15, 1900

Survey commenced June 21, 1900

Survey completed June 27, 1900

6-161

15-16-30 ✓

East Ridge 6-08-02 ✓
S. Ridge 6-04-70 ✓
N. Ridge 6-03-38 ✓

NAMES AND DUTIES OF ASSISTANTS.

Andrew Nelson	chairman
Fred Wright	chairman
Ray Bryan	moderator
Edward Jones	flagman
Edward Jones	atman.

BOOK A-369

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Andrew Nelson and Fred Wright

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the south, east + retracement of fractional N. bdy. T22S, R. 7 E. of the S.L.B. & M., Utah.

Andrew Nelson, Chainman.
Fred Wright, Chainman.

Subscribed and sworn to before me this 21st day of June, 1910



Howard W. Miller
U.S. Deputy Surveyor

I, Ray Bryan

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ^{me} us, to the best of ^{my} skill and ability, in the survey of the south, east + retracement of the fractional N. bdy. T. 22 S., R. 7 E. of the S.L.B. & M., Utah.

Ray Bryan, Moundman.
Ray Bryan, Moundman.

Subscribed and sworn to before me this 21st day of June, 1910



Howard W. Miller
U.S. Deputy Surveyor

I, Edward Jones

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ^{me} us, to the best of ^{my} skill and ability, in the survey of the south, east + retracement of the fractional N. bdy. T22 S., R 7 E. of the S.L.B. & M., Utah.

Edward Jones, Axman.
Edward Jones, Axman.

Subscribed and sworn to before me this 21st day of June, 1910



Howard W. Miller
U.S. Deputy Surveyor

I, Edward Jones, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the south, east + retracement of the fractional N. Bdy. T 22 S., R 7 E of the S.L.B. & M., Utah.

Edward Jones, Flagman.

Subscribed and sworn to before me this 21st day of June, 1910



Howard W. Miller
U.S. Deputy Surveyor

East Boundry of T. 22 S., R. 7 E.

chains

Survey commenced June 20, 1910, and executed with a W. and L. E. Gurley Light mountain transit. No. 9624 with solar attachment. For description and test of instrument see Book " A " of this survey.

I begin at the cor of Tps. 21 and 22 S., Rs. 7 & 8 E., which I established May 22, 1910. Latitude $38^{\circ} 56' 29''$ N., longitude $111^{\circ} 07' 14''$ W.

In order to test the solar apparatus, by comparing the results of observations on the sun, made during a.m. and p.m. hours, with a true meridian determined by observations on Polaris, I proceed as follows:

At 4h. 01^m.p.m.l.m.t., I set off $38^{\circ} 56\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 27\frac{1}{2}'$ N. on the decl. arc; and mark the meridian thus determined with the solar, on a stone firmly set in the ground, 5 chains N. of my station.

June 20, 1910

June 21: At 1h. 47^m.a.m.l.m.t. by my watch, which carries incorrect local mean time, I observe Polaris at Eastern elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground 5 chs. N. of my station.

At 7h. a.m.l.m.t. I lay off the azimuth of Polaris, $1^{\circ} 30.6'$ to the west, and find that this meridian agrees with my solar meridian determined June 20.

At 8h. 01^m.a.m.l.m.t I set off $38^{\circ} 56\frac{1}{2}'$ N., on the lat. arc; $23^{\circ} 28'$ N. on the decl. arc. and determine a meridian with the solar. This meridian also agrees with the meridian established by Polaris observation. I therefore conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h. a.m. is N. $16^{\circ} 35'$ W.; the angle thus determined gives the mag. decl. $16^{\circ} 35'$ E.

East Boundry T. 22 S., R.7 E.

chains
480.00

From the tp. cor already described, I run South on a random line along the east boundary of the tp. setting temporary $\frac{1}{4}$ and sec. corners at intervals of 40.00 chains, and at set temp. cor. of tps. 22 and 23 S., Rs. 7 and 8 E.

June 21, 1910.

June 22: At 7h. 02m.a.m.l.m.t. I set off $38^{\circ} 51\frac{1}{4}'$ N. on the 1st. arc; $23^{\circ} 28'$ N. on the decl. arc; and determine a mer. with the solar at the temp. cor of tps. 22 and 23 S., Rs 7 and 8 E.

Thence I run West, on a random along the S. boundary of the tp. setting temp. $\frac{1}{4}$ and sec, cors. at intervals of 40. 00 chs. and at 484.90 chs., intersect the 2nd. Guide Meridian 8.02 chs. N. of the cor. of tps. 22 and 23 S., Rs 6 and 7 E., which is a sandstone 16x7x4 ins. marked and witnessed as described by the surveyor general.

This tp. cor is nearly obliterated; I reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 3ins. in dia., 24 ins. in the ground for cor. of Tps. 22 and 23 S., Rs 6 and 7 E. marked on brass cap

- T 22 S on N. half,
- T 23 S. on S. half,
- R. 6 E.S36 On NW.,
- R 7 E S 31 on NE.,
- R 7 E S 6 on SE.,
- R 6 E S 1 on SW. quadrant, and raise a mound of earth and stone, 6 ft. base, 3 ft. high S. of cor.

Pits impracticable.

June 22, 1910.

June 23: At 7 h. 02m.a.m.l.m.t.I set off $38^{\circ} 51\frac{1}{4}'$ N. on t

South boundary of T 22 S., R. 7 E.

chains

the lat. arc; 23° 28' N. on the decl. arc; and determine a meridian with the solar at the cor of Tps. 22 and 23 S., Rs 6 and 7 E.

Thence I run East, bet. secs. 6 and 31, marking and blazing true line. Over nearly level land.

21.66

At base of high mesa and exceptionally difficult mountainous land. It will be impossible to set the 1/4 sec. cor. at its true point, I therefore Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for witness point to the 1/4 sec. cor., marked on brass cap
T 22 S R 7 E S 31 on N.

S 6 on S. half

W P 1/4 on E. and dig pits 18x18x12 ins E. and W.

of post 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 2 ft. high, N. of cor.

Thence up steep W. slope

44.90

Point for 1/4 sec. cor. falls on very steep land with loose shifting soil and cannot be permanently set.

59.75

Ledge, 100 ft. high, bears N.15°W. and S.

61.75

Top of ascent and S. point of mesa, 1000 ft. above tp. cor., bears N. and S.

63.00

East face of mesa and ledge 100 ft. high, bears NE. and SW.

Thence down steep E. slope

78.00

Base of mesa, 800 ft. below top, bears N.15°E. and SW.

Leave mountainous land, gradually descend.

84.90

Set an iron post, 3 ft. long, 3 ins in dia., 24 ins. in the ground for cor. of secs. 5, 6, 31 and 32, marked on brass cap

T 22 S R 7 E on N. half,

T 23 S on S. half,

S 31 in NW.,

S 32 in NE.,

S 5 in SE.,

South boundry T. 22 S., R.7 E.

chains

S 6 in SW. quadrant, dig pits 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist. from cor. and raise a mound of earth, 5 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, clay, 4 th. rate.

Mountainous land 56.84 chs.

No timber.

June 23: At this sec. cor. I set off $23^{\circ} 27'$ N. on the decl. arc; and at 12h. 02m.p.m. 1.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 51\frac{1}{4}'$.

East, bet. secs. 5 and 32

Over rolling land

40.00

Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S32 on N. half and S 5 on S. half; dig pits 18x18x12 ins. E. and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

80.00

Set an iron post, 3 ft. long, 3 ins. in dia., 24 is in the ground, for cor. of secs. 4, 5, 32, and 33, marked on brass cap

T 22 S R 7 E on N. half

T 23 S on S. half,

S32 in NW,

S 33 In NE.,

S 4 in SE. and

S 5 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, rolling.

Soil, clay; 3rd. rate.

No timber.

East, bet. secs. 4 and 33

Gradually ascend over mesa top thru scattering cedar and pinon.

South Boundary T. 22 S., R. 7 E.

chains	
18.00	Leave timber and E. edge of mesa, bears N. and S. Thence down steep E. slope.
25.00	Base of mesa, 250 ft. below top, bears N. and S.
33.00	Wash, 50 lks. wide, course N. leave timber Thence ascend over broken land
40.00	On S. slope of sharp spur Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 33 on N. and S 4 on S. half, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
47.00	Sharp rocky ridge, bears NW. and SE., desc. 125 ft.
54.25	Wash, course N. Ascend 75 ft. to
61.00	Top of N. end of mesa, enter cedar and pinon, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, .3 ins. in dia., 24 ins. in the ground for cor of secs. 3, 4, 33 and 34, marked on brass cap T 22 S R 7 E on N. half, T 23 S on S. half. S 33 in NW., S 34 in NE., S 3 in SE., and S 4 in SW. quadrant, and raise a mound of stone 3 ft. base, 2 ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th rate. Timber, cedar and pinon. Mountainous and timbered land 80.00 chs.

June 23, 1910.

June 24: At 8h.02 m. a.m. l.m.t. I set of $38^{\circ} 51\frac{1}{4}'$ N. on
the lat. arc; $23^{\circ} 26\frac{3}{4}'$ N. on the decl. arc; and deter-
mine a meridian at the cor of secs, 3, 4, 33 and 34

South Boundary T 22 S., R. 7 E.

chains	on the S. boundary of the tp.
	Thence I run
	East, bet. secs. 3 and 34
	Over mountainous land thru forest of cedar and pinon.
2.00	East, edge of mesa, bears NW. and S.20° E.
	Descend 250 ft. over steep E. slope to
17.00	Wash, course NE.
	Thence over broken land sloping N.
26.00	Wash, course N.
36.00	Gulch, 50 ft. deep, course NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 34 on N. half and S 3 on S. half, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable. Begin ascent over land sloping NW.
69.00	Wash, course NW.
80.00	Set an iron post, 3 ft. long, 3 ins in dia., 24 ins. in the ground for cor of secs. 2,3,34, and 35, marked on brass cap
	T 22 S R 7 E on N. half
	T 23 S. on S. half,
	S 34 in NW.,
	S35 in NE.,
	S 2 in SE.,
	S.3 in SW. quadrant, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, some cedar and pinon.
	Mountainous or timbered land 80.00
	<hr/>
	East, bet. secs. 2 and 35.
	Over mountainous land thru scattering cedar and pinon.
15.00	Ridge and top of ascent, bears NE. and SW. A high rock peak bears SW. about 9 chs.

South Boundry T. 22 S., R. 7 E.

chains	Descend 250 ft. over land sloping NE.
28.00	Base of steep mountainous land bears NW. and S.
33.00	Enter dense cedar and pinon, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd on brass cap $\frac{1}{4}$ S 35 on N. half and S 2 on S. half; from which A cedar, 16 ins. in diam., bears S. $47\frac{1}{4}^{\circ}$ E. 120 lks. dist., mkd. $\frac{1}{4}$ S 2 B T. A cedar, 4 ins. diam., bears N. 27° W. 121 lks. dist., mkd. $\frac{1}{4}$ S 35 B T. June 24: At this $\frac{1}{4}$ sec. cor I set off $23^{\circ} 26'$ N. on the decl. arc; and at 12h.02m.p.m.l.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 51\frac{1}{4}'$.
40.50	Wash, 10 lks wide, course N.
43.00	Leave timber, bears N. and S. Thence gradually descend over sandy bench.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 2, 35 and 36, mkd. on brass cap T 22 S R 7 E on N. half, T 23 S on S. half, S 35 in NW., S 36 in NE., S 1 in SE. and S 2 in SW quadrant; from which A cedar, 10 ins. diam., bears N. $60\frac{3}{4}^{\circ}$ E. 108 lks. dist., mkd T 22 S R 7 E S 36 B T. A cedar, 15 ins. diam., bears S. $72\frac{1}{2}^{\circ}$ W. 185 $\frac{1}{2}$ lks. dist., mkd. T 23 S R 7 E S 2 B T. A cedar, 6 ins. diam., bears N. $37\frac{3}{4}^{\circ}$ W. 56 lks. dist., mkd. T 22 S R 7 E S 35 B T. and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. No other bearing tree within limits. Land mountainous and rolling. Soil, rocky and sandy; 3rd. rate.

South boundary, T. 22 S., R. 7 E.

chains
 Timber, some cedar and pinon.
 Mountainous land 28.00 chs.

East, bet. secs. 1 and 36
 Over mountainous land
 1.50 Top of 50 ft. ledge, bears N. and S.
 4.00 Base of descent, 125 ft. below top, bears N. and S.
 Thence gradually descend across sandy bench
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 36 on
 N. half and S 1 on S half; dig pits 18x18 x 12 ins.,
 E. and W. of post 3 ft. dist., and raise a mound of
 earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 44.00 Top of 40 ft. ledge, bears N. and S.
 Descend steep E. face of break.
 49.00 Base of descent, 125 ft. below top, bears N. and S.
 Thence gradually descend towards wash.
 66.75 Wash, 50 lks, wide, course SW.
 Thence ascend over broken bad land hills.
 80.00 Intersect E bdy. of the tp. 8.02 chs. South of the temp.
 cor of Tps. 22 and 23 S., Rs 7 and 8 E.
 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins in
 the ground for cor of Tps. 22 and 23 S., Rs. 7 and 8 E.
 marked on brass cap
 T 22 S on N. half,
 T 23 S. on S. half,
 R 7 E S 36 in NW.,
 R 8 E S 31 in NE.,
 S 6 R 8 E in SE. and
 S 1 R 7 E in SW. quadrant; raise a mound of
 stone, 3 ft. base, 2 ft. high S. of cor. Pits impract-
 icable. I destroy temp. cor.
 Land, mountainous.
 Soil, sandy and rocky; 2nd. and 4th. rates
 No timber.

June 24, 1910.

East Boundry of T 22 S., R 7 E.

chains	
	<p>June 25: At 8 h. 02m. a.m. l.m.t. I set off $38^{\circ} 51\frac{1}{4}'$ N. on the lat. arc; $23^{\circ} 26'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of tps. 22 and 23 S., Rs. 7 and 8 E.</p> <p>Thence I run</p> <p>North bet. secs. 31 and 36.</p> <p>Over mountainous land draining W.</p>
11.70	<p>Wash, 20 lks. wide, 30 ft. deep, course W.</p> <p>Begin steep ascent over series of ledges facing S.</p>
13.50	60 ft. ledge, bears E. and W.
18.80	40 ft. ledge, bears E. and W.
19.90	<p>Top of ascent and W. end of butte, 250 ft. above base, bears E. and W.</p> <p>Descend abruptly 250 ft. to</p>
31.00	<p>Base of descent, bears NE. and SW.</p> <p>Thence across hollow.</p>
39.50	<p>Point for $\frac{1}{4}$ sec. cor will fall in wash.</p> <p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for witness cor. to the $\frac{1}{4}$ sec cor, marked on brass cap</p> <p>T 22 S in N.</p> <p>R 8 E S 31 in E.</p> <p>W C $\frac{1}{4}$ in S. and</p> <p>R 7 E S 36 in W.; dig pits 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft high W. of cor.</p>
40.00	Point for $\frac{1}{4}$ sec. cor. falls on rock bed of wash, cut cross on rock for exact cor. point. course of wash, W.
43.00	Begin abrupt ascent over red bluff.
48.20	Ledge 100 ft. high, bears SE. and W.
50.25	Top of ascent and sand bench, 300 ft. above wash, bears E. and W.
56.00	Thence over bench,
73.70	Begin gradual descent.
73.70	Gulch, near head, 50 ft. deep, course W.
73.80	40 ft. ledge, bears E. 3 chs. and W. to canyon.

East boundary of T 22 S., R 7 E.

- chains
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor of secs. 25, 30, 31 and 36, marked on brass, cap
- T 22 S in N. half,
S 30 in NE.,
R 8 E S 31 in SE
R 7 E S 36 in SW and
S 25 in NW. quadrant; raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
- Land, mountainous.
Soil, rocky and sandy; 4th rate.
Land mountainous and exceptional difficult to survey
80.00 chs.
No timber.
- June 25: At this sec. cor I set off 23° 25' N. on the decl. arc; and at 12h. 2m.p.m.l.m.t. observe the sun on the meridian; the resulting lat. is 38° 52'.
-
- North bet. secs. 25 and 30.
- Over rolling sand bench, sloping NW.
- 1.25 Wash, near head, course W.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground and mound of stone for ¼ sec. cor. mkd. on brass cap ¼ S 25 on W. and S 30 on E. half; raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
- 41.58 Wash, course W.
- 59.60 Wash, course S 80° W.
- 59.70 Ledge, 20 ft. high, bears E. and W.
Thence gently ascend.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor of secs. 19, 24, 25 and 30, marked on brass, cap
- T 22 S on N. half,
S 19 in NE,

East boundary of T. 22 S., R 7 E.

- chains
- R 8 E S 30 in SE, and
 R 7 E S 25 in SW. and
 S 24 in NW. quadrant; dig pits 18 x 18 x 12 ins.
 in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth
 4 ft. base, 2 ft. high W. of cor.
- Land, rolling.
- Soil, sandy and bedrock; 4th rate.
- No timber.
-
- North bet. secs. 19 and 24.
 Over mountainous land.
- 2.50 Base of mountainous land, bears E and SW.
- Ascend broken land facing S and SW, 250 ft. to
- 28.50 Spur, projects E.
 Descend 75 ft. to
- 33.00 Hollow, course E.
- Ascend steep SW. slope 100 ft. to
- 37.00 Spur, projects SE. Point for $\frac{1}{4}$ sec. cor. will fall on
 steep slope where it cannot be perpetuated. therefore
 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground for witness cor. to the $\frac{1}{4}$ sec. cor., marked on
 brass cap T 22 S W C $\frac{1}{4}$ on N.
- R 8 E S 19 on E. and
 R 7 E S 24 on W.; raise a mound of stone 2 ft.
 base, $1\frac{1}{2}$ ft. high W. of cor.
- 40.00 True point for $\frac{1}{4}$ sec. cor falls on steep slope where it
 cannot be perpetuated.
- 42.00 Top of ascent, bears NE. and SW.
- Thence over hilly broken land sloping NW.
- 52.00 Top of small knoll, bears W. 2 chs.
- 63.80 Wash, course NW.
- 69.25 Wash, course W.
- 77.50 Wash, 30 ft. deep, course NW.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the

East boundary of T. 22 S., R 7 E.

chains

ground for cor. of secs. 13, 18, 19 and 24, mkd. on
brass cap

T 22 S on N. half,

R 7 E S 13 in NW.,

R 8 E S 18 in NE.,

S 19 in SE. and

S 24 in SW. quadrant; dig pits, 18 x 18 x 12

ins. in each sec. $5\frac{1}{2}$ ft. dist. from post, and raise a
mound of earth 4 ft. base, 2 ft. high W. of cor.

Land, mountainous.

Soil, clay, rocky and gravelly, 3rd. and 4th. rate.

No timber.

June 25, 1910.

Mountainous land 80.00chs

June 25, 1910

June 26: At 7h.02m.a.m.1.m.t. I set off $38^{\circ} 54'$ N. on the
lat. arc; $23^{\circ} 24\frac{1}{2}'$ N. on the decl. arc; and determine a
meridian with the solar at the cor. of secs. 13, 18, 19
and 24

Thence I run

North, bet secs. 13 and 18

Over broken hilly land sloping W.

8.25 Wash, 65 ft. deep, course W.

15.10 Wash, course W.

18.70 Wash, course W.

30.00 Wash, course N. 80° W.

33.20 Wash, 10 lks. wide, course SW.

36.00 Enter cedar and pinon, bears E. and W.

Gradually ascend

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 13, on
W half, and S 18 on E. half; from which

A cedar, 10 ins. diam., bears N. 77° E. $94\frac{1}{2}$ lks.
dist. mkd. $\frac{1}{4}$ S 13 B T.

A cedar, 12 ins. diam., bears N. $24\frac{1}{2}^{\circ}$ W. 45 lks.
dist. mkd. $\frac{1}{4}$ S 13 B T.

Ascend 30 ft. to

42.50 Ridge, bears N. 80° E. and S. 80° W.

East boundary T.22 S., R-7 E.

- chains
- 64.00 Leave timber, bears NE. and SW.
- 70.00 Base of ridge, bears E and W.
- 74.00 Top of ridge, bears E. and W.
- 80.00 Set an upon post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor of secs. 7, 12, 13 and 18, mkd on brass cap
 - T 22 S on N. half,
 - R 7 E S 12 in NW.,
 - R 8 E S 7 in NE.,
 - S 18 in SE. and
 - S 13 in SW. quadrant; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
- Land, mountainous.
- Soil, clay and rocky; 2nd. and 4 th. rate.
- Timber cedar and pinon on 32.00 chs.
- Land mountainous or heavily timbered 80.00 chs.

- North, bet. secs. 7 and 12
- Over mountainous land
- Descend 50 ft.
- 1.50 Base of ridge. bears SE. and W.
- 8.50 Wash, 20 lks. wide, course E.
- 11.25 Base of ridge, bears NE. and SW.
- Thence up steep ascent
- 16.00 Ridge, 150 ft. above base, bears SW. and NE.
- 19.00 Head of hollow. drains SW.
- 22.00 Ridge, bears NE. and SW.
- 36.75 Wash, 15 lks. wide, course N. 15° E.
- 39.00 Same wash, course N.
- 39.50 Same wash, at foot of spur turns NE. ascend
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. mkd on brass cap ¼ S 12 on W. half and S 7 on E. half; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.

East boundry T. 22 S., R. 7 E.

chains

June 26: At this $\frac{1}{4}$ sec. cor. I set off $23^{\circ} 23\frac{1}{2}'$ N. on the decl. arc; and at 12h. 02m.p.m.1.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 55'$.

43.25 Spur, projects NE.descend

48.00 Wash, course E.
Thence up steep S. slope of mesa over huge boulders.

56.70 Top of mesa , 200 ft. above wash, bears E. and W.
Thence over mesa top.

69.00 Leave mesa, bears NE. and W.
Descend rocky NW. slope 125 ft. to

77.35 Wash, course NE..

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor of secs. 1,6,7 and 12 mkd on brass cap

T 22 S on N. half,
R 7 E S 1 in NW.,
R 8 E S 6 in NE.,

S 7 in SE. and
S 12 in SW. quadrant; from which
A cedar, 5 ins. diam., bears S. 34° E. $75\frac{1}{2}$ lks. dist.
mkd. T 22 S R 8 E S 7 B T.

and raise a mound of stone, 2ft. base $1\frac{1}{2}$ ft. high W. of cor. No other bearing trees within limits.

Land, mountainous.

Soil, rocky; 4th. rate.

Timber, a few scattering cedars.

Mountainous land 80.00 chs.

North, bet. secs. 1 and 6.

Over mountainous land.

Ascend S. face of mesa.

5.75 Top of mesa, 50 ft. above sec. cor., bears E. and W.
Thence over rolling mesa top.

11.00 Leave mesa, bears E. and NW.
Descend 150 ft. over land sloping NE. to

East Boudry T. 22 S., R. 7 E.

chains	
29.50	Base of descent, bears NE and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of earth and stone for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 1 on W. half and S 6 on E. half; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Impossible to set post 20 ins. in the ground.
42.60	Wash, course NE.
45.50	Base of mountain bears NE. and SW. Ascend 100 ft. to
56.00	top of spur, projects SE. descend
65.10	Wash, course E. Ascend 50 ft. to
70.50	Ridge, bears E. and SW. descend 100 ft. to
80.00	Base of ridge, bears E. and NW. Gradually descend
88.02	Intersect the cor. of Tps. 21 and 22 S., Rs. 7 and 8 E. heretofore described. Land, mountainous. Soil, rocky; 4th. rate. No timber. Mountainous land 88,02 chs.

June 26, 1910.

Howard Miller

U. S. Deputy Surveyor.

For general description see book "H" of this survey.

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Page

Retracement N. boundary T. 22 S., R. 7 E.

chains

June 27: At 7h.02. m.a.m. l.m.t. I set off $38^{\circ} 56\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 22\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on the N. bdy of the tp. heretofore described.

Thence I run

West, retracing line bet. secs. 4 and 33

41.03 Fall 36 lks. N. of the $\frac{1}{4}$ sec. cor. which is a sandstone 14 x 10 x 6 ins. mkd. and witnessed as described by the surveyor general. The mks. on this stone are nearly obliterated, I reestablish cor. at the same point as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap, $\frac{1}{4}$ S33 on N. half and S 4 on S. half; dig pits 18 x 18 x 12 ins.

E. and W. of post 3 ft. dist., and raise a mound of earth 3 ft. base $1\frac{1}{2}$ ft. high N. of cor.

The bearing of this line is $S:89^{\circ} 30'$ W., and the dist. is 41.03 chs.

From the $\frac{1}{4}$ sec. cor. I continue

West.

40.99 Fall 57 lks. N. of the cor. of secs. 4, 5, 32 and 33, which is a limestone, 14 x 10 x 6 ins., mkd. as described by the surveyor general. The mks on this stone are nearly obliterated. I destroy all traces of the old cor. and reestablish it at the same point as follows:
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, mkd on brass cap

T 21 S R 7 E on N. half,

T 22 S on S. half,

S 32 in NW.

S 33 in NE.

S 4 in SE. and

S 5 in SW. quadrant; dig pits, 18 x 18 x 12

ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of

Retracement N. boundry T. 22 S., R. 7 E.

chains

earth, 4 ft. base, 2 ft. high W. of cor.

The true course of this line is S. 89° 12' W., and the distance is 40.99 chs.

West, retracing line bet, secs. 5 and 32

40.80 Fall 62lks. N. of the 1/4 sec. cor. whicy is a limestone 10 x 10 x 7 ins., mkd as described by the surveyor general The mks. on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26ins. in the ground, for 1/4 sec. cor. mkd. on brass cap 1/4 S 32 on N. half and S 5 on S. half; dig pits, 18x 18x 12 ins. E. and W. of post 3ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high N. of cor. The true bearing of this line is therefore S. 89° 07' W. 40.80 chs.

From the 1/4 sec. cor. I continue west,

40.76 Fall 51 lks. N. of the cor. of secs. 5, 6, 31 and 32 which is a limestone 10 x 1 x 5 ins., mkd. and witnessed as described by the surveyor general. The mks on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32 mkd. on brass cap

- T 21 S R 7 E on N. half,
- T 22 S on S. half,
- S 31 in NW.,
- S 32 in NE.,
- S 5 in SE. end

S 6 in SW. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Retracement N. boundry T. 22 S., R. 7 E.

chains

The bearing of this line is S. 89° 17' W., and the dist. is 40.76 chs.

West, retracing line bet. secs. 6 and 31

40.35 Fall 41 lks. N. of the 1/4 sec. cor. which is a limestone 11 x 10 x 7 ins., mkd. as described by the surveyor general. The mks. on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows;

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor. mkd. on brass cap 1/4 S 31 on N. half and S 6 on S half; dig pits 18 x 18 x 18 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 ft. base, 1 1/2 ft. high N. of cor. The true bearing of this line is therefore S 89° 25' W. 40.35 chs.

From the 1/4 sec. cor. I continue West

40.45 Fall 45 lks. N. of the cor. of Tps. 21 and 22 S., Rs. 6 and 7 E., which is a sandstone 24 x 16 x 9 ins., mkd. and witnessed as described by the surveyor general.

The mks. on this stone are nearly obliterated, I destroy all traces of the old cor. and reestablish it at the same point as follows.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of Tps. 21 and 22 S., Rs. 6 and 7 E. mkd. on brass cap

T 21 S on N. half,

T 22 S on S. half,

R 6 E S 36 in NW.,

R 7 E S 31 in NE.,

R 7 E S 6 in SW. and

R 6 E S 1 in SW. quadrant; dig pits 24 x 24 x 12 ins. crosswise on each line E., W. and N. 4 ft. and S. of post 8 ft. dist., and raise a mound of earth 5 ft.

base, 2 ft. high S. of cor. The true course of this line is therefore S. 89° 21' W. 40.45 chs.

June 27: The sky was overcast at the noon hour, obser-

Retracement of the North Boundry T. 22 S., R. 7 E.

chains

For general description see book " H " of this survey.

Howard Miller

U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W. Miller and
Andrew Nelson United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of the south,
east, & retracement of the fractional N. bdy. T22S.,
R7E of the S.L.B. & M. Utah,
showing the respective capacities in which they acted:

- Andrew Nelson Chairman.
- Fred Wright Chairman.
- Ray Bryan Moundman.
- Edward Jones Moundman.
- Edward Jones Axman.
- Edward Jones Axman.
- Edward Jones Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W. Miller and
Andrew Nelson United States Deputy Surveyor, in surveying all
those parts or portions of the east, south and the
retracement of the fractional north
boundary T22S., R. 7 E.
..... of the Salt
Lake Base meridian, Utah of Utah which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for Utah.

- Andrew Nelson Chairman.
- Fred Wright Chairman.
- Ray Bryan Moundman.
- Edward Jones Moundman.
- Edward Jones Axman.
- Edward Jones Axman.
- Edward Jones Flagman.

Subscribed and sworn to before me this 27th
day of June, 1910

Howard W. Miller
U.S. Deputy Surveyor.



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Howard W. Miller, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, ~~1908~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the East, South, and fractional North Boundary of Township 22 South, Range 7 East

of the Salt Lake Base and _____ meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Howard W. Miller
United States Deputy Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me
this 17 day of January, 1911, ~~1910~~

Thomas Hull
U. S. Surveyor-General



for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1911

The foregoing field notes of the survey of the East and South, and retracement of fractional North Boundary of Township 22 South, Range 7 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller and Andrew Nelson their under his contract No. 316, dated January 15, 1910, ~~1908~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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4-670.

Books "G."
BOOK A-369

FILED
JAN 17 1911

FIELD NOTES

Re-
OF THE SURVEY OF THE

X. 3. 6.

[Handwritten signature]

Second Guide Meridian T 22 S
R. 7 E.

of the Salt Lake Base and Meridian,

U T A H.

AS SURVEYED BY

Howard W. Miller & Andrew Nelson, United States Deputy Surveyors

Under ^{their} ~~his~~ Contract No. 316, dated January 15, 1900

Survey commenced June 27, 1900

Survey completed June 29, 1900

6-05-11



NAMES AND DUTIES OF ASSISTANTS.

Andrew Nelson, Chainman.

Fred Wright, Chainman.

Edward Jones, Chainman.

Morris Singleton, Chainman.

Andrew Nelson, Moundman.

Ray Bryan, Axman and Flagman.

BOOK A-369

INDEX DIAGRAM.

Township _____, Range _____

6	6	5	4	3	2	1
5	7	8	9	10	11	12
4	16	17	18	15	14	13
344	19	20	21	22	23	24
2	30	29	28	27	26	25
142	31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

Edward Jones _____ Morris Singleton
 WE, Andrew Nelson and Fred Wright
 do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ^{re} survey of the 2nd Guide Meridian, T 22 S. R 7 E of the S.L.B. & M., Utah.

Andrew Nelson }
Fred Wright } , Chainmen
Edward Jones }
Morris Singleton } , Chainmen

Subscribed and sworn to before me this 27th
 day of June, 1900



Howard W. Miller
 U.S. Deputy Surveyor

I, Andrew Nelson and _____
 do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us ^{me} to the best of our ^{my} skill and ability, in the ^{re} survey of the Second Guide Meridian, T 22 S. R 7 E of the S.L.B. & M., Utah.

Andrew Nelson , Moundman
 _____ , Moundman

Subscribed and sworn to before me this 27th
 day of June, 1900



Howard W. Miller
 U.S. Deputy Surveyor

I, Ray Bryan and _____
 do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us ^{me} to the best of our ^{my} skill and ability, in the ^{re} survey of the Second Guide Meridian T 22 S. R. 7 E. of the S.L.B. & M., Utah.

Ray Bryan , Axman
 _____ , Axman

Subscribed and sworn to before me this 27th
 day of June, 1900



Howard W. Miller
 U.S. Deputy Surveyor

I, Ray Bryan do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in resurvey of the Second Guide Meridian, T 22 S 7 E. of the S.L.B. & M., Utah.

Ray Bryan , Flagman

Subscribed and sworn to before me this 27th
 day of June, 1900



Howard W. Miller
 U.S. Deputy Surveyor

Resurvey Second Guide Meridian, T. 22 S.

chains

Survey commenced June 27, 1910, and executed with a W. & L. E. Gurley light mountain transit No. 9624. For description and test of instrument see book "A" of this survey. Knowing the instrument to be in adjustment by observations made on Polaris June 21, 1910. I begin at the cor of Tps, 21 and 22 S., Rs. 6 and 7 E., Thence I run

South, retracing along the W. bdy. of the tp., making careful search at intervals of 40.00 chs., for $\frac{1}{4}$ sec. and sec. cors.; difference between measurements of 485.28 chs., by two sets of chainmen is 10 lks.; position of middle point

By 1st set, 485.32 chs.

By 2nd set, 485.22 chs.; the mean of which is 485.28 chs. Fall 1.82 chs. W. of cor. of Tps. 22 and 23 S., Rs. 6 and 7 E. heretofore described. The falling answers to a correction of $0^{\circ} 13'$ or $30 \frac{3}{10}$ lks. per mile. Counting from the NW. cor. of the township. Finding no trace of any sec. or $\frac{1}{4}$ sec. cors. on this line, I resurvey the range line as follows

June 28: At 7h 03m a.m., l.m.t., I set off $38^{\circ} 51\frac{1}{2}'$ on the lat arc; $23^{\circ} 19\frac{3}{4}'$ N. on the decl. arc; and determine a meridian with the solar, at the cor. of Tps. 22 & 23 S., Rs. 6 & 7 E., heretofore described.

Thence I run

N. $0^{\circ} 13'$ W., resurveying bet. secs. 31 and 36.

Over rolling land, sloping S.

Difference by two measurements of 40.44 chs., by two sets of chainmen is 2 lks.; position of middle point,

By 1st set 40.45 chs.,

By 2nd set, 40.43 chs.; the mean of which is

40.44 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 36 on

Resurvey Second Guide Meridian T. 22 S.

chains

W. and S 31 on E. half; dig pits 18 x 18 x 12 ins.,
N. and S. of post, 3 ft. dist., and raise a mound of
earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

48.25 Wash, 10 lks. wide, 5 ft. deep, course S.35° W.

52.50 Same wash, course SE.

56.25 Same wash, course SW.

57.75 Same wash, course SE.

62.30 Same wash, course SW.

70.00 Base of mountain, bears E, and W.

Thence up steep S. face.

Difference between measurements of 80.88 chs., by two
sets of chainmen is 6 lks., position of middle point is
By 1st. set, 80.91 chs.,

By 2nd set, 80.85 chs.; the mean of which is

80.88 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in
the ground, for cor. of secs. 25-30-31 and 36, marked on
brass cap

T 22 S on N. half,

R 7 E S 30 in NE.,

S 31 in SE.,

S 36 in SW., and

R 6 E S 25 in NW. quadrant; raise a mound
of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Pits impracticable.

Note: cor. situated on steep S. slope of mesa.

Land, rolling and mountainous.

Soil, gravelly and clayish; 3rd rate.

Mountainous land, on 10.88 chs.

No timber.

N. 0° 13' W., resurveying bet. secs. 25 and 30.

Over mountainous land.

Resurvey second Guide Meridian T. 22 S.

chains	
	Ascend steep S. face of mesa
5.25	Top of 175 ft. ledge and mesa 575 ft. above base of mountain bears E. and W.
	Thence over broken mesa top through forest of cedar and pinon.
10.00	Begin gradual descent into broad hollow, bears E. and W.
36.80	Wash, 20 lks. wide, course SW., and base of descent 125 ft. below top. gradually ascend
	Difference between measurement of 40.44 chs., by two sets of chainmen is 2 lks.; position of middle point
	By 1 st. set, 40.45 chs.,
	By 2nd. set, 40.43 chs., the mean of which is
40.44	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 25 on W. half and S 30 on E. half; from which
	A pinon, 14 ins. diam., bears N. 61° E., 29 lks. dist., marked $\frac{1}{4}$ S 30 B T.
	A cedar, 8 ins. diam., bears S. $64\frac{1}{4}^{\circ}$ W., $92\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 25 B T.
	Continue gradual ascent over land facing SE.
65.00	Top of ascent, 150 ft. above wash, and leave broad hollow, bears NE. and S. 30° W.
	Thence over mesa sloping NW.
	Difference between measurement of 80.88 chs. by two sets of chainmen is 10 lks., position of middle point
	By 1 st. set, 80.93 chs.,
	By 2nd. set, 80.83 chs., the mean of which is
80.88	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap
	T 22 S on N. half,
	R 6 E S 24 in NW.,
	R 7 E S 19 in NE.,
	S 30 in SE. and
	S 25 in SW. quadrant; from which

Resurvey Second Guide Meridian T. 22 S.

chains	<p>A pinon 10 ins. diam., bears S. $30\frac{1}{2}^{\circ}$ W., 56$\frac{1}{2}$ lks., dist., Marked T22 S R 6 E S 25 B T</p> <p>A pinon, 7 ins. diam., bears N $77\frac{1}{2}^{\circ}$ W., 27 lks. dist., marked T 22 S R 6 E S 24 B T</p> <p>and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high W. of cor.</p> <p>Pits impracticable.</p> <p>No other trees within limits.</p> <p>Land, mountainous.</p> <p>Soil, rocky; 4 th. rate.</p> <p>Timber, cedar and pinon.</p> <p>Land mountainous and heavily timbered 80.88 chs.</p> <p>-----</p> <p>N. 0° 13' W., resurveying bet. secs. 19 and 24</p> <p>Over broken mesa top through dense cedar and pinon</p>
27.00	<p>Begin steep descent over land facing N. into gulch, bears E. and W.</p>
32.00	<p>Coal outcropping, bears E. and W.</p> <p>Thence descend over ledges.</p> <p>Difference between measurement of 40.44 chs. by two sets of chainmen is 4 lks., position of middle point</p> <p>By 1st. set, 40.46 chs.,</p> <p>By 2nd. set, 40.42 chs., the mean of which is</p>
40.44	<p>175 ft. below top of mesa and leave ledges, bears N. 20° E. and S. 20° W.</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 24 on W. half and S 19 on E. half; from which</p> <p>A pinon, 9 ins. diam., bears S. $43\frac{1}{4}^{\circ}$ E., 113 lks. dist., marked $\frac{1}{4}$ S 19 B T.</p> <p>A pinon, 6 ins. bears N. $71\frac{1}{4}^{\circ}$ W. 93 lks. dist., marked $\frac{1}{4}$ S 24 B T</p>
53.00	<p>Wash, 40 lks. wide, course SW.</p> <p>Thence up rocky land</p>
65.00	<p>Enter ledges and coal outcroppings, bear E. and SW.</p>

Reurvey second guide Meridian T. 22 S.

chains
66.50

Top of ascent and ledges, 300 ft. above wash, bears
N. 60° E. and SW.

June 28, 1910.

June 29: At 7 h. 3 m. a.m.l.m.t., I set off $38^{\circ} 53\frac{3}{4}'$ on the lat. arc; $33^{\circ} 17\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at this station

Thence I run

N. $0^{\circ} 13'$ W.

Difference between measurement of 80.88 chs. by two sets of chainmen is 10 lks., position of middle point

By 1st. set, 80.93 chs,

By 2nd. set, 80.87 chs., the mean of which is

80.88

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap

T 22 S on N. half,

R 6 E S 13 in NW.,

R 7 E S 18 in NE.,

S 19 in SE. and

S 24 in Sw quadrant, from which

A pinon, 10 inc. diam., bears S. $30\frac{1}{2}^{\circ}$ W., 56 $\frac{1}{2}$ lks. dist.

marked T 22 S R 6 E S 24 R T

A pinon, 7 inc. diam., bears N. $77\frac{1}{2}^{\circ}$ W., 27 lks. dist.,

marked T 22 S R 6 E S 13 R T.

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. No other bearing trees within limits.

Pits impracticable.

Land, mountainous.

Soil, rocky; 4 th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 80.88 chs.

N. $0^{\circ} 13'$ W., reurveying bet. secs. 13 and 18.

Over broken mesa top through forest of cedar and pinon

4.10

Wash, course W. and wood road bears W. and N, 20° E.

Reurvey second guide meridian T. 22 S.

- chains
- 38.70 Wash, course W.
 Difference between measurement of 40.44 chs. by two sets of chainmen is 3 lks., position of middle point
 By 1 st. set, 40.45 chs.
 By 2 nd. set, 40.43 chs., the mean of which is
- 40.44 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $\frac{1}{4}$ S 13 on W. half and S 18 on E. half; from which
 A pinon, 12 ins. diam., bears S 77° E., 35 lks. dist., marked $\frac{1}{4}$ S 18 B T.
 A pinon, 8 ins. diam., bears N. 57° W., 71 lks. dist., marked $\frac{1}{4}$ S 13 B T.
 Difference between measurement of 80.88 chs, by two sets of chainmen is 6 lks., position of middle point
 By 1st. set, 80.91 chs.
 By 2 nd. set, 80.85 chs., the mean of which is
- 80.88 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap
 T 22 S on N. half,
 R 6 E S 12 in NW.,
 R 7 E S 7 in NE.,
 S 18 in SE. and
 S 13 in SW. quadrant; from which
 A pinon, 5 ins. diam., bears S. $22\frac{1}{2}^{\circ}$ W., 153 lks. dist.,
 Marked T 22 S R 6 E S 13 B T
 A pinon, 12 ins. diam., bears N. $58\frac{1}{2}^{\circ}$ W., 55 lks. dist.,
 marked T 22 S R 6 E S 12 B T.
 and raise a sound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. No other bearing trees within limits.
 Land, mountainous.
 Soil, rocky; 4 th. rate.
 Timber, cedar and pinon.
 Land mountainous and heavily timbered, 80.88 chs.

Resurvey Second Guide Meridian T. 22 S.

chains	<p>N. 0° 13' W., resurveying bet. secs. 7 and 12 Descend over rolling mesa top through scattering cedar and pinon.</p>
10.90	Wood road, bears N. 80° W. and S. 80° E.
13.20	Wash, 30 lks. wide, course SW. leave mesa, bears E. and SW.
	<p>Difference between measurement of 40.44 chs. by two sets of chainmen is 4 lks., position of middle point</p> <p style="padding-left: 40px;">By 1st. set, 40.46 chs.</p> <p style="padding-left: 40px;">By 2 nd. set, 40.42 chs., the mean of which</p>
40.44	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brasscap $\frac{1}{4}$ S 12 on W. half and S 7 on E. half, dig pits 18x18x12 ins. N. and S. of post, 3ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.</p>
48.25	<p>Road, Emery, Utah, to Rochester, Utah, bears W. and N. 80° E. Difference between measurement of 80.88 chs. by two sets of chainmen is 10 lks., position of middle point is</p> <p style="padding-left: 40px;">By 1 st. set, 80.93 chs.</p> <p style="padding-left: 40px;">By 2 nd. set, 80. 83 chs., the mean of which is</p>
80.88	<p>Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap</p> <p style="padding-left: 40px;">T 22 S on N. half,</p> <p style="padding-left: 40px;">R 6 E S 1 in NW.,</p> <p style="padding-left: 40px;">R 7 E S 6 in NE.,</p> <p style="padding-left: 40px;">S 7 in SE. and</p> <p style="padding-left: 40px;">S 12 in SW. quadrant., dig pits, 24x18x 12 ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.</p> <p>Land, rolling.</p> <p>Soil, gravelly and rocky; 3 rd. and 4 th. rates</p> <p>Timber, cedar and pinon on 13 chs.</p>

Resurvey Second Guide Meridian T.22 S.

chains	<p>June 29: At this sec. cor. I set off 23° 16' N. on the decl. arc; and at 12h. 03m.p.m.l.m.t., observe the sun on the meridian. the resulting lat is 38° 56'.</p> <p style="text-align: center;">-----</p> <p>W. 0° 13' W., resurveying bet. secs. 1 and 6</p> <p>Gradually ascend over gently rolling land.</p> <p>Difference between measurement of 40.44 chs. by two sets of chainmen is 2 lks., position of middle point</p> <p style="padding-left: 40px;">By 1st. set, 40.45 chs.</p> <p style="padding-left: 40px;">By 2 nd. set, 40.43 chs. the mean of which is</p>
40.44	<p>Set an iron post, 3.ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 1 on W. half and S 6 on E. half; dig pits, 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft, high, W, of cor.</p>
44.65	<p>Wash, course SE.</p>
56.00.	<p>Thence over gravelly bench</p> <p>Difference between measurement of 80.88 chs. by two sets of chainmen is 4lks., position of middle point</p> <p style="padding-left: 40px;">By 1 st. set, 80.90 chs.</p> <p style="padding-left: 40px;">By 2 nd. set, 80. 86.chs., the mean of which is</p>
80.88	<p>The cor. of T's. 21 and 22 S., Rs. 6 and 7 E., heretofore described.</p> <p>Land, rolling.</p> <p>Soil, gravelly, 3 rd. rate.</p> <p>No. timber.</p>

June 29, 1910

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For general description see book " H " of this survey

Howard W. Miller

U. S. Deputy Surveyor

BOOK A-369

Boundaries of T. 22 S., R. 7 E.

Latitudes, Departures, and Closing Errors.

Lines Designated,	True Bearing	Dist.	Latitudes Departures.			
			N.	S.	E.	W.
		chs.	chs.	chs.	chs.	chs.
N.bdy.						
East 3 miles	West	242.20				242.20
N.bdy. sec. 4,	S. 89° 30' W.	41.03		.36		41.03
N.bdy. sec. 4,	S. 89° 12' W.	40.99		.57		40.99
N.bdy. sec. 5,	S. 89° 07' W.	40.80		.63		40.80
N.bdy. sec. 5,	S. 89° 17' W.	40.76		.51		40.76
N.bdy. sec. 6,	S. 89° 25' W.	40.35		.41		40.35
N.bdy. sec. 6	S. 89° 21' W.	40.45		.46		40.45
W.bdy. of Tp.	S. 0° 13' E.	485.28		485.28	1.83	
S.bdy. of Tp .	East	484.90			484.90	
E.bdy. of Tp.	North	488.02	488.02			
Convergence						.57
T o t a l s			488.02	488.22	486.73	487.15
Error in lat. and dep.				<u>488.02</u>		<u>486.73</u>
				.20		.42

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W. Miller Esq

Andrew Nelson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the ^{re-}survey of the Second Guide Meridian T 22 S. R. 7 E. of the S. L. B. & M., Utah, showing the respective capacities in which they acted:

- Andrew Nelson Chairman.
- Fred Wright Chairman.
- Edward Jones ~~Chairman~~ Moundman.
- Morris Singleton ~~Chairman~~ Moundman.
- Andrew Nelson ~~Moundman~~ Assman.
- Ray Bryan Assman.
- Ray Bryan Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W. Miller and

Andrew Nelson, United States Deputy Surveyor, in surveying all those parts or portions of the Second Guide Meridian T 22 S. R. 7 E.

of the Salt Lake Basin meridian, Utah State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for U t a h.

- Andrew Nelson Chairman.
- Fred Wright Chairman.
- Edward Jones ~~Chairman~~ Moundman.
- Morris Singleton ~~Moundman~~ Moundman.
- Andrew Nelson ~~Moundman~~ Assman.
- Ray Bryan Assman.
- Ray Bryan Flagman.

Subscribed and sworn to before me this 29 day of June, 1960



Howard W. Miller
U. S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Howard W. Miller, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, ~~1908~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the resurvey of the Second Guide Meridian, Township 22 South, Range 7 East

Base and meridian, in the State of Utah, of the Salt Lake, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Howard W. Miller
United States Deputy Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me
this 17 day of January, 1911, ~~1908~~

Thomas Hull
U. S. Surveyor-General



for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1911

The foregoing field notes of the ^{re} survey of the Second Guide Meridian, through Township 22 South, Range 7 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller and Andrew Nelson
under his contract No. 316, dated January 15, 1910, ~~1908~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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M.S.B.

4-679.

BOOK A-369

FIELD NOTES

OF THE SURVEY OF THE

M.S.B.
R.S.B.

Subdivisions of T. 22 S., R. 7 East

Of the *Salt Lake Base* Meridian,

U. T. A. H.

AS SURVEYED BY

Howard W. Miller and Andrew Nelson, United States Deputy Surveyor, S

Under his Contract No. *316*, dated *January 15*, 1900

Survey commenced *June 30*, 1900

Survey completed *July 15*, 1900

June 60-61-81
July 15-20

NAMES AND DUTIES OF ASSISTANTS.

Andrew Nelson, chairman
Fred Wright, chairman
Ray Bryan, moundsman
Edward Jones, axman
Edward Jones, flagman

BOOK A-369

INDEX DIAGRAM.

Township 22 South, Range 7 East

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7	55	8	42	9	31	10	20	11	9	12
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31	44	32	34	33	23	34	12	35	1	30

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Andrew Nelson and Fred Wright
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivisions T 22 S, R 7 E of the S. L. B.
& M., Utah.

Andrew Nelson, Chainman.
Fred Wright, Chainman.

Subscribed and sworn to before me this 30th
day of June, 1910



Howard W. Miller
U. S. Deputy Surveyor

I, Ray Bryan and
do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ^{me} to the best of ^{my} skill and ability, in the survey of the subdivision of T 22 S R 7 E of the S. L. B.
& M., Utah.

Ray Bryan, Moundman.
Moundman.

Subscribed and sworn to before me this 30th
day of June, 1910



Howard W. Miller
U. S. Deputy Surveyor

I, Edward Jones and
do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ^{me} to the best of ^{my} skill and ability, in the survey of the subdivision of T 22 S R 7 E of the S. L. B. &
M., Utah.

Edward Jones, Axman.
Axman.

Subscribed and sworn to before me this 30th
day of June, 1910



Howard W. Miller
U. S. Deputy Surveyor

I, Edward Jones, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision of T 22 S R 7 E of the S. L. B. & M., Utah.

Edward Jones, Flagman.
Flagman.

Subscribed and sworn to before me this 30th
day of June, 1910



Howard W. Miller
U. S. Deputy Surveyor

SUBDIVISION OF T. 22 S., R. 7 E.

Chains

Survey commenced June 29, 1910, and executed with the same instrument as described in book "A" of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:-

At the cor. of secs. 1, 2, 35 and 36 on the S. bdy. of Tp., heretofore described; lat. $38^{\circ} 51\frac{1}{4}' N.$; long. $111^{\circ} 08' 20'' W.$, I set off $38^{\circ} 51\frac{1}{4}' N.$ on the lat. arc; $23^{\circ} 16' N.$ on the decl. arc; and at 5h 03m p.m., l.m.t., determine a meridian with the solar, and mark a point thereof, on a stake set in the ground 5 chs. N. of the cor.

June 29, 1910.

June 30: At 1h 02m a.m. by my watch, which carries correct l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground 5 chs. N. of my station.

At 6 a.m. l.m.t., I lay off the azimuth of Polaris $1^{\circ} 30.6'$ to the west, and find that this meridian agrees with my solar meridian determined June 29.

At 8h 03m a.m., l.m.t., I set off $38^{\circ} 51\frac{1}{4}' N.$ on the lat. arc; $23^{\circ} 13\frac{1}{2}' N.$ on the decl. arc; and determine with the solar a meridian. This meridian agrees with the stellar meridian. I therefore conclude that the instrument is in adjustment.

The magnetic bearing of the true meridian at 8h 30m a.m. is $N. 16^{\circ} 35' W.$; the angle thus determined gives the mag. decl. $16^{\circ} 35' E.$

From said cor. of secs. 1, 2, 35 and 36 I run

SUBDIVISION OF T. 22 S., R. 7 E.

Chains	
	N. 0° 01' W. bet. secs. 35 and 36 Descending gradually over rolling sandy land; through scattering cedar and pinon pine.
10.75	Wash, course E.; ascend.
18.00	Leave cedar and pinon pine, bearing E. and W.
24.00	Ridge, bears E. and W. Descend gradually 100 ft. to
39.50	Wash, 10 lks. wide, course N. 75° E.
39.80	Ledge, 100 ft. high, bears N. 75° E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 35 on W., and S 36 in E. half; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.00	Small ridge, bears E. and W. Descend 75 ft. to
56.35	Wash, 25 lks. wide, drains N. 65° E.
56.80	Ledge, bears N. 65° E. and W.
58.00	Top of ledge, 75 ft. high, bears NE. and W. Point of ledge, projects E. 1 ch.
58.80	Ledge, 100 ft. high, bears NW. and SE.
62.00	Wash, 25 lks. wide, course SE.
63.75	Base of 40 ft. ledge, bears SE. and NW.
65.00	Top of ledge, bears SE. and NW.
66.00	Point of ledge, projects W. 150 lks.
67.70	60 ft. ledge, bears N. 80° E. and N. 80° W.
68.00	Same wash, 35 lks. wide, course S. 80° W.
72.00	Small spur, projects NE.
75.20	Same wash, 50 ft. below spur, course E. 3 chs., thence SW.
76.00	Ledge, 30 ft. high, bears W. and E. 2 chs.; thence SW.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked on brass cap T 22 S S 26 in NW R 7 E S 25 in NE S 36 in SE., and S 35 in SW. quadrant; raise a mound of stone

Subdivision of T. 22 S., R. 7E.

chains	<p>2 ft. base, 1½ ft. high W. of cor. Pits impracticable.</p> <p>Land, mountainous.</p> <p>Soil, rocky and sandy 3rd and 4th rate.</p> <p>Timber, scattering cedar and pinon on 18 chs.</p> <p>Land mountainous on 80.00 chs.</p>
	<p>East on random line bet. secs. 25 and 36.</p>
40.00	Set temp. ¼ sec. cor.
80.03	Intersect E. bdy. of the tp. 12 lks. S. of cor. of secs. 25, 30, 31 and 36, heretofore described.
	Thence I run
	S. 89° 55' W. on true line bet. secs. 25 and 36.
	Over broken mountainous land, gradually descend over sandstone bedrock and sandy soil to
15.00	Top of descent, bears N. and S.
	Thence descend 200 ft. over ledges into canon.
29.00	Bottom of canon, course S.
	Ascend W. side
33.15	Ledge and wall of canon, 100 ft. high, bears N. and S.
	Thence over broken top.
40.01½	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 25 on N. and S 36 on S. half; raise a mound of stone 2 ft. base 1½ ft; high N. of cor. Pits impracticable.
46.90	Low sand ridge, bears N. and S.
	Gradual descend over sandstone bed rock .
57.50	Top of canon wall and ledge, bears N. and S.
	Descend abruptly 175 ft. over ledges
59.40	Wash in bottom of canon, 30 lks wide, course S.
	Ascend 75 ft.
62.00	W. wall of canon 35 ft. high, bears N. and S.
	Thence over land sloping W.
80.03	The cor. of secs. 25, 26, 35 and 36.
	Land, mountainous.
	Soil, rocky and sandy; 3rd and 4th-rate.

Subdivision of T. 22 S., R 7 E.

Chains

Land mountainous on 80.0⁰ 3 chs.

N. 0° 01' W. bet. secs. 25 and 26.

Over rolling mountainous land, alonging SE.

32.25 Wash, course S 80° E.

Ascend 75 ft. to

34,50 Spur, projects E.

36.00 Descend abruptly 100 ft. to

38.50 Base of descent, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 26 on W. and S 25 on E. half; dig pits, 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

43.00 Wash, 30 lks. wide, drains S 25° E.

Note: An alkali, bitter seap, bears down wash 2 chs.

Ascend 100 ft. to

47.00 Top of steep ascent, bears NW. and SE.

Thence gradually ascend over broken land sloping SE.

66.00 Wash, near head, drains SE.

74.00 Ridge, bears E. and W.

Descend.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 23, 24, 25 and 26; marked on brass cap

R 7 E S 24 in NW

S 25 in SE

S 26 in SW and

T 22 S S 25 in NW. quadrant; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly, adobe, and rocky; 3rd and 4th rates.

Mountainous land on 80.00 chs.

Subdivision of T. 22 S., R. 7 E.

chains	July 1. At 7h. 03m.a.m.l.m.t. I set off $38^{\circ} 53'$ N. on the lat. arc; $23^{\circ} 10'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.
	Thence I run
	N. $89^{\circ} 55'$ E. on random line bet. secs. 24 and 25.
40.00	Set temp. & sec. cor.
80.07	Intersect the E. bdy. of tp. 12 lns S. of the cor. of secs. 19, 24, 25 and 30 heretofore described.
	Thence I run
	S. $89^{\circ} 50'$ E. on true line bet. secs. 24 and 25.
	Over sandy loam land nearly level.
5.50	Enter mountainous land, and adobe and rocky soil, bears NE. and SE.
	Ascend broken land.
18.00	Ridge, bears E. and S.
	Descend 100 ft. over land sloping SE.
22.75	Hollow, course S.
	Ascend 100 ft. over steep SE. slope to
30.75	Ridge, bears NE. and SE.
	Thence along N. slope of ridge.
35.75	Top of knoll on N. point of ridge, descend over W. slope
40.03	At base of steep slope, bearing NW. and SE.
	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{2}$ sec. cor., marked on brass cap $\frac{1}{2}$ S 24 on N. and S 25. on S. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Gradually descend over broken land sloping W.
54.25	Wash at bend, from NE. to NW.
61.20	Same wash, course S.
	Ascend 100ft. to
68.50	Sharp ridge, bears NE. and SE.
	Descend over land facing NW.
80.07	The cor. of secs. 23, 24, 25 and 26.

Subdivision of T. 22 S., R 7 E.

chains

Land, mountainous.

Soil, rocky, clayish and gravelly.

Mountainous land on 74.57 chs.

No timber.

 N. 0° 01' W. bet. secs. 23 and 24.

Over mountainous land, thru forest of scattering cedar and pinon.

.30 Wash, 8 lks. wide, drains N 75° W.

Ascend 100 ft. to

8.50 Ridge, bears E. and W., descend.

11.80 Wash, 6 lks. wide, drains W.

Gradually ascend to

34.00 Spur, projects NW.

Gradually descend.

40.00 Set an iron post, 3 ft. long, 1 in. diam., marked on brass cap $\frac{1}{4}$ S 23 on W. and S 24 on E. half; from which

26 ins. in ground for $\frac{1}{4}$ sec.

 A cedar, 16 ins. dia., bears N 54 $\frac{1}{2}$ ° E. 172 lks. dist.
 marked ~~on brass cap~~ $\frac{1}{4}$ S 24 B T.

 A cedar, 24 ins. dia., bears S 44 $\frac{3}{4}$ ° W. 79 lks. dist.
 marked $\frac{1}{4}$ S 23 B T.

Leave scattering timber, bears E. and W.

68.80 Wash, 5 lks. wide, course S 80° W.

72.00 Enter low clay hills, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked on brass cap

R 7 E S 13 in NE

S 24 in SE

S 23 in SW. and

 T 22 S S 14 in NW. quadrant; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, rolling and mountainous.

Soil, gravelly and rocky 2nd and 4th rates.

Timber, scattering cedar and pinon

-7-

Subdivision of T. 22 S., R. 7 E.

chains	
	Land mountainous or heavily timbered 80.00 chs.
	July 1: At this sec. cor. I set off $23^{\circ} 08\frac{1}{2}'$ N. on the decl. arc; and, at 12h.05 ^m . 1.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 54'$.
	<hr/>
	N. $89^{\circ} 50'$ W. on random line bet. secs. 13 and 24.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
60.05	Intersect E. bdy. of tp. at cor. of secs. 13, 18, 19 and 24 heretofore described.
	Thence I run
	S. $89^{\circ} 50'$ W. on true line bet. secs. 13 and 24.
	Over rolling hills, sloping NW.
2.30	Hollow, 30 ft. deep, course NW.
24.70	Main drain, course SW., and base of hills, bears NE and S.
	Thence over land sloping nearly S.
28.00	Enter scattering cedars and pinon, bears NE. and SW.
40.02 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 13 on N. and S 21 on S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist; and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
50.00	Top of bench, bears N. and SW.; bench slopes NW.
56.00	Leave bench, bears NW and SE. and
	Leave cedar and pinon, bears NW and SE.
66.80	Wash, drains SW.
68.00	Enter clay hills, bears NE and SW.
80.05	The cor. of secs. 13, 14, 23 and 24.
	Land, rolling and hilly.
	Soil, gravelly and clayish 2nd and 3rd rates.
	Timber, scattering cedar and pinon on 28.00 chs.
	<hr/>
	N $0^{\circ} 01'$ W. bet. secs. 13 and 14.
	Over rolling land. gradually ascend 50 ft. to
5.50	S. face of low bench, bears E. and W.
	Thence across gently rolling flat.

Subdivision of T. 22 S., R 7E.

chains

- 38.75 Leave flat and enter mountainous land, bears W. and SE.
Ascend steep land facing S. and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins in the
ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 14 on W.
and S 13 on E. half; raise a mound of stone 2 ft. base,
 $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- Continue to ascend.
- 46.50 W. point of Spur, 100 ft. above base, bears E.
Thence over broken land facing W.
- 54.50 Hollow, 100 ft, deep, course SW.
- 56.00 Ascend 100 ft. over S. face of spur.
- 60.00 Spur, projects W. 3 chs., descend
- 66.50 Follow, course S 30 W., ascend 75 ft. to
- 71.25 Bench, and enter few scattering cedars, bears E. and W.
- 78.00 Leave timber, bears E. and W.
- 80.00 Set an iron post. 3 ft. long, 2 in. diam., 24 ins. in the
ground for cor. of secs. 11, 12, 13 and 14, marked on
brass cap

T 22 S S 11 in NW

R 7 E S 12 in NE

S 13 in SE

S 14 in SW, quadrant; raise a mound of stone
2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, mountainous and rolling.

Soil, rocky and gravelly.

Timber, few scattering cedars on last $\frac{1}{2}$ mile.

Mountainous land on 41.25 chs.

July 1, 1910.

July 2: At 7h. 04m. a.m. l.m.t., I set off $32^{\circ} 54'$ N. on
the lat. arc; $23^{\circ} 06'$ N. on the decl. arc; and deter-
mine a meridian with the solar at the cor. of secs.
11, 12, 13 and 14.

Thence I run

N. $89^{\circ} 50'$ E. on random line bet. secs. 12 and 13.

Subdivision of T. 22 S., R. 7 E.

chains	
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect the E. bdy. of tp. 2 lks N. of cor. of secs. 7, 12, 13 and 18. heretofore described.
	Thence I run
	S $89^{\circ} 51'$ W. on true line bet. secs. 12 and 13.
	Over broken clayish bench lands.
13.00	Spur of bench, projects NW. 1 ch.
40.01	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 12 on N. and S 13 on S. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
45.00	Begin ascent over land facing E., bears NE. and S.
56.00	E. point of bench and enter cedars, bears NE. and SW.
64.00	Leave timber, bears NE. and SW.
67.00	Base of spur, bears N. and S.
	Ascend land facing SE. 100 ft. to
74.80	Ridge, bears N. and S., descend 135 ft. to
79.00	Base of descent.
80.02	The cor of secs. 11, 12, 13 and 14.
	Land, hilly and mountainous.
	Soil, red clay, adobe and gravelly; 3rd rate.
	Timber, cedars on 3 chs.
	Mountainous land on 35.00 chs.
	<hr/>
	N $0^{\circ} 01'$ W. bet. secs. 11 and 12.
	Over mountainous land.
	Ascend steep S. face of mesa, 200 ft. to
6.25	Top of mesa, and enter dense forest of cedar and pinon, bears E. and W.
	Thence gradually descend over broken mesa top, sloping NW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 11 on

Subdivision of T. 22 S., R 7 E.

chains

W. and S 12 on E. half; from which

A pinon, 7 ins.dia., bears N $81\frac{1}{2}^{\circ}$ E. 51 lks., dist.
marked $\frac{1}{4}$ S 12 B T.

A pinon, 9 ins.dia., bears S $76\frac{3}{4}^{\circ}$ W. 42 lks. dist
marked $\frac{1}{4}$ S 11 B T.

78.40 Wash, course NE.

80.00 Set an iron post, 3 ft. long, 2 ins.diam., 24 ins. in the
ground for cor. of secs. 1, 2, 11 and 12, marked on brass
cap

T 22 S S 2 in NW,

R 7 E S 1 in NE,

S 12 in SE and

S 11 in SW. quadrant; from which

A pinon, 10 ins.dia., bears N $13\frac{1}{2}^{\circ}$ E. 310 lks. dist.
marked T 22 S R 7 E S 1 B T

A pinon, 8 ins.dia., bears S $84\frac{1}{4}^{\circ}$ E. 120 lks. dist.
marked T 22 S R 7 E S 12 B T

A pinon, 7 ins.dia., bears S $30\frac{1}{2}^{\circ}$ W. 173 lks. dist.
marked T 22 S R 7 E S 11 B T.

A pinon, 8 ins.dia., bears N $32\frac{1}{4}^{\circ}$ W. 167 lks. dist.
marked T 22 S R 7 E S 2 B T

Land, mountainous and broken

Soil, rocky and clay; 4th rate.

Timber, dense cedar and pinon on 74.75 chs.

July 2: At this sec. cor I set off $23^{\circ} 05'$ N. on the decl. p.m.
arc; and, at 12h 04m. l.m.t. observe the sun on the meridian
the resulting lat. is $38^{\circ} 55\frac{1}{2}'$ N. which is proper lat.

N $89^{\circ} 51'$ E. on random line bet. secs. 1 and 12.

40.00 Set temp. $\frac{1}{4}$ secs. cor.

80.84 Intersect the E bdy. of tp. 2 lks. S of cor. of secs.
1, 6, 7, and 12 heretofor described.

Thence I run

S $89^{\circ} 50'$ W. on true line bet. secs. 1 and 12.

Subdivision of T. 22 S., R. 7 E.

chains
 Over broken land, thru scattering cedars and pinon.
 Gradually descend.
 9.20 Wash, drains SW., ascend 50 ft. to
 17.50 Ridge, bears NE. and SW.
 26.00 Leave timber, bears NE. and S.
 Gradually descend.
 31.60 Wash, 15 lks. wide, course NE.
 40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 1 on N.
 and S 12 on S. half; raise a mound of stone 2 ft. base
 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
 Ascend steep E. face of mesa, 125 ft. to
 45.00 Top of narrow necked mesa, bears N. and S.
 Enter timber, bears N. and S., thence over broken mesa.
 61.00 Gradually descend land sloping NW.
 78.50 Wash, 20 lks. wide, course N.
 80.04 The cor. of secs. 1, 2, 11 and 12.
 Land, broken and mountainous.
 Soil, adobe, rocky and some sandy loam.
 Timber, cedar and pinon on 35.00 chs.
 Mountainous land, 80.04 chains.
 N. 0° 01' W. on random line bet. secs. land 2.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 88.19 Intersect the N. bdy. of tp. 5 lks W. of cor. of secs.
 1, 2, 35 and 36. heretofore described.
 Thence I run
 S. 0° 01' W. on true line bet. secs. 1 and 2.
 Over rolling land.
 7.50 Enter bottom of Dry wash, bears E and W.
 10.70 Dry wash, 20 lks. wide, course, NE.
 11.75 Leave bottom of Dry wash, bears N. and W.
 Thence over land, gentle slope, to N.
 48.19 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 2 on W.

Subdivision of T. 22 S., R. 7 E.

- chains
- and S 1 on E. half; dig pits 18 x 18 x 12 ins., 3 ft. dist. N and S. of post, and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
- 52.00 Wash, drains NE.
- 70.89 Same wash, drains NW.
- 74.19 Enter scattering cedar and pinon, bears NE and S 15° W.
- 88.19 The cor. of secs. 1, 2, 11 and 12.
- Land, rolling.
- Soil, clayish and gravelly 2nd rate.
- Timber, few scattering cedars on last ½ mile.
- July 2, 1910.
- July 3: AT 7h. 4m. a.m. set off 38° 51¼' N. on the lat. arc; 23° 02' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 in the S. bdy. heretofore described.
- Thence I run
- N. 0° 01' W. bet. secs. 34 and 35.
- Over broken mountainous land, facing W. and NW.
- 4.00 Descend abruptly 100 ft.
- 10.00 Draw, course NW., thence over land facing W.
- 20.50 Low ridge, bears E. and W.
- Descend over series of ridges and draws, course NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 34 on W. and S 35 on E. half; raise a mound of stone 2-ft. base, 1½ ft. high W. of cor. Pits impracticable.
- 46.00 Enter wash, from SW., course N.
- 50.00 Leave wash, course NE.
- Asc. 75 ft. to
- 64.50 Low ridge, bears E. and W., descend 75 ft.
- 69.00 Wash, 25 lks. wide, 50 ft. deep. course N 80° E.
- Ascend land facing SE.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

Subdivision of T. 22 S., R. 7 E.

chains

ground for cor. of secs. 26, 27, 34 and 35, marked on
brass cap

T 22 S S 27 in NW,

R 7 E S 26 in NE,

S 35 in SE. and

S 34 in SW. quadrant; raise a mound of stone
2 ft. base, 1½ ft. high W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky and adobe; 4th rate.

Mountainous land on 80.00 chs.

No timber.

East on random line bet. secs. 26 and 35.

40.00 Set temp. ¼ sec. cor.

80.06 Intersect N and S. line 5 lks S. of the cor. of secs.
25, 26, 35 and 36.

Thence I run

S. 89° 58' W. on true line bet. secs. 26 and 35.

Over broken mountainous land.

Ascend land facing SE.

17.25 Ridge, bears N and S.

Descend 100 ft.

28.70 Wash, course SE.

Ascend 75 ft. to

34.25 Low spur, projects S.

Thence over land facing E.

40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground for ¼ sec. cor., marked on brass cap ¼ S 26 on
N. and S 35 on S. half; raise a mound of stone 2 ft.
base, 1½ ft. high N. of cor. Pits impracticable.

43.60 Rocky spur, projects S.

Descend 175 ft. over rocky land sloping SW.

49.45 Rocky hollow, course SE.

51.50 Begin steep ascent from canon.

Subdivision of T. 22 S., R 7 E.

chains

80.06 The cor. of secs. 26, 27, 34 and 35.

Land, mountainous.

Soil, rocky and adobe, 3rd and 4th rates.

Mountainous land on 80.06 chs.

No timber.

Sky overcast lat. obsn. impossible.

 N. 0° 01' W. bet. secs. 26 and 27.

Over broken and mountainous land.

Ascend 200 ft. over land sloping S.

13.75 Ridge, bears NE. and SW., enter cedar and pinon, bears E&W.

24.30 Draw, course NW.

27.50 Low ridge, bears E and W.

Descend Rocky N slope.

33.70 Wash, course NE., ascend.

40.00 Point for $\frac{1}{4}$ sec. cor. falls on bedrock, mark cross at true cor. point, and at

41.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap T 22 S R 7 E in N
 S 26 in E
 $\frac{1}{4}$ W C in S and
 S 27 in W ; from which
 A pinon, 9 ins. diam., bears S 29° E. 171 lks. dist.
 marked $\frac{1}{4}$ S 26 B T W C.

A cedar, 8 ins. diam., bears S 61° W. 102 lks. dist.

marked $\frac{1}{4}$ S 27 B T W C.

51.50 Wash, 1 ch. wide, 4 ft. deep, drains NE.

55.00 Low ridge, bears E. and W.

Leave cedar and pinon, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 22, 23, 26 and 27, marked on brass cap

T 22 S S 22 in NW,

Subdivision of T 22 S., R 7E.

chains

R 7 E S 23 in NE,
S 26 in SE, and
S 27 in SW. quadrant; raise a mound of stone 2 ft.
base, 1½ ft. high W. of cor. Pits impracticable.

Land, broken and mountainous.

Soil, rocky and clay; 4th rate.

Timber, scattering cedar and pinon on 41.2⁵ chs.

July 3, 1910.

July 5: 7h. 45 a.m. l.m.t. I set off 39° 53' N. on the
1st. arc; 22° 52' N. on the decl. arc; and determine
a meridian with the solar at the cor. of secs. 22, 23,
25 and 27.

Thence I run

N. 89° 58' E. on random line bet. secs. 23 and 26.

40.00 Set temp. & sec. cor.

50.10 Intersect N and S line, 12 lks. N. of cor. of secs. 23,
24, 25 and 26.

Thence I run

N. 89° 57' E. on true line bet. secs. 23 and 26.

Over broken land.

5.25 Wash, 15 lks. wide, course SW, ascend 50 ft. to

22.00 Flat top ridge, bears NE. and SW.

Descend 75 ft.

34.20 Wash, 15 lks. wide, drains S.

Ascend 150 ft. over land facing SW.

39.40 Top of ascent and bench, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground for ¼ sec. cor., marked on brass cap ¼ S 23 on N.
and S 26 on S. half; raise a mound of stone 2 ft. base,
1½ ft. high N. of cor. Pits impracticable.

43.60 Leave bench and descend abruptly 100 ft. over bluff,
bears NW. and SW.

45.50 Base of bluff, bears N 80° W. and SW.

Thence along N. side of wash.

Subdivision of T 22 S., R 7 E.

chains

55.30 Wash in rocky gulch, 50 ft. deep, course SE.

53.00 Wash, at bend, from N 80° W. to NE.

Gently ascend.

80.10 The cor of secs. 22, 23, 26 and 27.

Land, mountainous.

Soil, rocky and clay; 4th rate.

Mountainous land on 80.10 chs.

No timber..

 N. 0° 01' W. bet. secs. 22 and 23.

Over rolling and broken land.

2.00 Wash, 35 lks. wide, 10 ft. deep, course E.

25.50 Top of small adobe butte, 35 ft. high.

38.00 Begin ascent over rocky SE. slope.

40.00 On E. slope of mesa.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 22 on W. and S 23 on E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Continue along E. face of break, over boulders.

52.00 Base of break, bears N 20° W. and S 20° E.

54.25 Wash, at bend, from NE. to S 20° E.

Ascend 200 ft. over S. rocky face of mesa.

58.10 Top of ascent and mesa, bears NE and SW.

Thence over rolling bench land.

79.65 Wash, drains S 80° E.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 14, 15, 22 and 23, marked on brass cap

T 22 S S 15 in NW,

R 7 E S 14 in NE,

S 23 in SE and

S 22 in SW. quadrant; big pits 18 x 18 x 12 ins. in each sec. $3\frac{1}{2}$ ft. dist., and raise a mound of

Subdivision of T. 22 S., R 7 E.

chains

earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling and Mountainous.

Soil, clay and rocky, 4th. rate.

Mountainous land on 42. chs.

No. timber.

July 5 : At this sec. cor. I set off $22^{\circ} 50\frac{1}{4}'$ N. on the decl arc ; and at 12 h. 04 m..p.m..l.m.t., observe the sun on the meridian; the resulting lat, is $38^{\circ} 54'$.

S. $89^{\circ} 57'$ E., on a random line Bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line at the cor of secs. 13, 14 , 23 and 24.

Thence I run

N. $89^{\circ} 57'$ W., on true line bet. secs. 14 and 23.

Over hilly and broken land with clay soil.

34.50 Wash, 10 lks. wide, course S.

Ascend

40.04 Set an iron post, 3 ft. long, 1 in. in dia., 26 ind. in

the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 14

on N. half and S 23 on S. half, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable

Ascend 75 ft. to

42.50 Top of flat ridge, bears N. and S.

Enter cedar and pinon.

Descend.

49.00 Hollow, near head, bourse SE.

Ascend 150 ft, onto higher bench.

55.50 Top of bench, bears N. and S.

Thence gradually descend over land facing NW.

62.00 Leave bench and cedar and pinon, bears N. and S.

Subdivision of T 22 S., R. 7 E.

chains

Thence over clay hills.

80.08 The cor of secs. 14, 15, 22 and 23.

Land mountainous.

Soil, clay and rocky; 4 th. rate.

Timber, cedar and pinon.

Mountainous or timbered land, 80.08 chs.

N. 0° 01' W., bet. secs. 14 and 15.

Over mountainous land

2,00 Ascend 200 ft. over land facing S.

13.00 Top of ascent and bench, bears E. and W.

Enter cedar and pinon, bears E. and W

Thence over rolling bench top.

35.00 Leave cedar and pinon and enter clay soil, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 15 on W. half and S 14 on E. half, dig pits, 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high W. of cor

56.00 Base of high mesa, bears N. 20° E. and S. 20° W.

Ascend steep E. slope over huge boulders.

80.00 Point for cor of secs. 10, 11, 14 and 15 falls at base of high ledge and on steep rocky ground where cor. cannot be permanently set.

Set temporary sec. cor.

Land, mountainous.

Soil, rocky; 4th. rate.

Timber cedar and pinon on 22 chs.

Mountainous land on 80.00 chs.

From temp. sec. cor. I run

S. 89° 57' E., on random line bet secs. 11 and 14

Subdivision of T. 22 S., R. 7 E.

- chains
80.06 Intersect N. and S. line 2 lks. S. of the cor of secs. 11,
12, 13 and 14
Thence I run
N. $89^{\circ} 58'$ W., on true line bet. secs. 11 and 14
Over mountainous land sloping S.
- 4.60 Spur, 100 ft. high, bears N. and S.
Descend 100 ft.
- 6.00 Base of spur, bears N. and S.
Thence along S. foot of steep land.
- 16.00 Wash in hollow, 150 ft. deep, course SE.
Ascend 150 ft. to
- 26.50 Ridge, bears N. and S. Low pass bears N. 2 chs.
Thence along land facing N.
- 30.50 N. end of spur, descend over broken land facing W.
- 40.03 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 11 on
N. half and S 14 on S. half; raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
- 41.75 Hollow, course S., 150 ft. deep.
Ascend over boulders.
- 52.00 Top of ascent and bench, bears N. and S.; enter cedar and
pinon, bears N. and S. Thence over rolling bench.
- 61.50 Leave timber, bears NE. and SW.; enter blue clay soil.
- 70.00 Base of high mesa, bears N. 20° E. and S. 20° W.
Thence up steep E. face 400 ft. to
- 80.06 The temp. cor of secs. 10, 11, 14 and 15.
Land, mountainous.
Soil, rocky and clay; 4 th. rate.
Timber, cedar and pinon on 9.50 chs.
Mountainous or timbered land on 80.06 chs.

July, 5, 1910.

July 6: At 7h.04, m.a.m. l.m.t., I set off $38^{\circ} 54\frac{3}{4}'$ N. on
the lat. arc; $22^{\circ} 46\frac{1}{2}'$ N. on the decl. arc; and determine
a mer. with the solar at the cor. of secs. 10, 11, 14 and
15

Thence I run

Subdivision of T. 22 S. 7 R. 7 E.

chains	N. $0^{\circ} 01'$ W., bet. secs. 10 and 11 Over mountainous land along steep E. face of mesa over huge boulders.
29.75	Ledge, 100 ft. high, bears N. 20° E. and S. 5° W.
30.40	Top of mesa, 500 ft. above base, enter dense cedar and pinon.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 10 on W. half and S 11 on E. half; from which A pinon, 8 ins. diam., bears N. 89° E. 38 lks. dist., marked $\frac{1}{4}$ S 11 B T. A pinon, 9 ins. diam., bears N. $32\frac{1}{4}$ W., 85 lks. dist., marked $\frac{1}{4}$ S 10 B T. Gradually descend land facing NW.
46.25	Descend abruptly.
48.00	Gulch, drains NW.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor of secs. 2, 3, 10 and 11 marked on brass cap T 22 S S 3 in NW., R 7 E S 2 in NE., S 11 in SE. and S 10 in SW. quadrant; from which A pinon, 8 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ E., 133 lks. dist., marked T 22 S R 7 E S 2 B T. A pinon, 7 ins. diam., bears S. $54\frac{1}{2}^{\circ}$ E., 87 lks. dist., marked T 22 S R 7 E S 11 B T. A cedar, 12 ins. diam., bears S. $73\frac{1}{2}^{\circ}$ W. 10 lks. dist., marked T 22 S R 7 E S 10 B T. A pinon, 14 ins. diam., bears N. 33° W. 47 lks. dist., marked T 22 S R 7 E S 3 B T Land, mountainous. Soil, rocky, 4 th. rate.

Subdivision of T 22 S., R 7 E.

chains

Timber, cedar, and pinon on 70.00 chs.

Land mountainous or heavily timbered 80.00 chs.

S. 89° 58' E. on random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line 2 lks. S. of the cor. of secs. 1, 2, 11 and 12.

Thence I run

N. 89° 59' W. on true line bet. secs. 2 and 11.

Over rolling land, thru few scattering cedars.

8.65 Wash, drains N., Leave timber, bears n. and S.

Thence gradually ascend, soil blue clay.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S $\frac{1}{2}$ on N. and S 11 on S. half; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

50.00 Base of high mesa, bears N. and S.

Ascend steep E. face over huge boulders.

64.26 Edge, 75 ft. high, bears N and S., enter cedar and pinon

Descend broken land facing NW.

80.04 The cor. of secs. 2, 3, 10 and 11.

Land, rolling and mountainous.

Soil, clay and rocky; 4th rate.

Timber, cedar and pinon on 24.43 chs.

Land mountainous or timbered 30.04 chs.

July 6: At this sec. cor. I set off 22° ^{pm} N. on the decl. arc; and, at 12h. 04m. 1.m.t. observe the sun on the meridian; the resulting lat. is 38° 55'; which is $\frac{1}{2}$ ' low.

N. 0° 01' W. on random line bet. secs. 2 and 3.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

88.29 Intersect the N. bdy, of tp. 7 lks. E. of cor. of secs. 2, 3, 34 and 35. heretofore described.

Thence I run

Subdivision of T 22 S., R 7 E.

chains	
	S. $0^{\circ} 04'$ E. on true line bet. secs. 2 and 3.
	Over rolling land, gradually descend to wash.
1.69	Road, from Rochester to Copper Globe, bears NE and NW.
7.30	Dry wash, 15 lks. wide, 5 ft. deep, course E.
	Gradually ascend.
19.00	Base of mountainous land, bears SE and W, ascend steep broken land facing N. and NW.
34.50	Spur, 150 ft. high, projects W.
37.50	Hollow, 200 ft. deep, course W.
	Ascend abruptly over ledges on N. slope of main mesa
45.70	Bluff, 70 ft. high, bears E. and W.
47.20	Top of mesa, 550 ft. above base, bears E. and W.
	Enter cedar and pinon, bears E. and W.
48.29	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 3° on W. and S 2° on E. half; from which
	A pinon, 10 ins. diam., bears S $72\frac{1}{2}^{\circ}$ E. 43 lks. dist., marked $\frac{1}{4}$ S 2 B T.
	A pinon, 12 ins. diam., bears S $3\frac{1}{2}^{\circ}$ W. 137 lks. dist., marked $\frac{1}{4}$ S 3 B T.
	Ascend over ledges, thru dense timber.
56.30	High ridge, Bears E. and W.
	Descend 275 ft. over ledges into canon.
66.30	Canon, course W., ascend abruptly.
75.80	Ridge, bears NW. and SE.
	Descend 75 ft.
79.50	Gulch, drains NW.; ascend 75 ft.
85.80	Low ridge, bears NW. and SE.
88.29	The cor of secs. 2, 3, 10 and 11.
	Land, mountainous. July 6, 1910.
	Soil, rocky and clay; 4th rate.
	Timber, cedar and pinon on 41.09 chs.
	Land mountainous, heavily timbered and exceptionally difficulty to survey 69.29 chs.
	July 6, 1910.

Subdivision of T 22 S., R 7 E.

chains

July 7: AT 8h.05m. a.m. l.m.t. I set off $38^{\circ} 51\frac{1}{2}'$ N. on the lat. arc; $22^{\circ} 39\frac{3}{4}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on S. bdy. of Tp., heretofore described.

Thence I run

N. $0^{\circ} 02'$ W. bet. secs. 33 and 34.

Over mountainous land

- 1.00 N. edge of top of mesa, bears E. and W., descend abruptly 200 ft. over N. slope. to
- 8.30 Wash, 20 lks. wide, course E. Base of mesa, bears E and W. Ascend 125 ft. to
- 18.50 Top of ascent and rocky bench, bears E. and W. Thence gradually descend over bench.
- 36.20 Wash, drains W., ascend over clay hills
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 28 ins. in the ground for $\frac{1}{4}$ sec. cor, marked on brass cap $\frac{1}{4}$ S 33 on W. and S 34 on E. half; raise a mound of stons 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- 44.50 Base of high mesa, bears E. and W. and Wash, drains W., ascend steep S face of rocky mesa, 300 ft. to
- 57.00 Top of ascent and mesa, bears E. and W.; enter cedar and pinonc. Thence gradually descend over bench.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 27, 28, 33 and 34, marked on brass cap

T 22 S S 28 in NW,

R 7 E S 27 in NE;

S 34 in SE and

S 33 in SW, quadrant; from which

A pinon, 3 ins. diam., bears N $20\frac{3}{4}^{\circ}$ E. 1150 lks. dist

marked T 22 S R 7 E S 27 B T

A pinon, 8 ins. diam., bears S $41\frac{1}{2}^{\circ}$ E. 68 lks. dist.

marked T 22 S R 7 E S 34 B T

Subdivision of T 22 S., R. 7 E.

chains

A pinon, 7 ins. diam., bears S $62\frac{1}{2}^{\circ}$ W. 80 lks. dist.

marked T 22 S R 7 E S 33 B T

A pinon, 8 ins. diam., bears N 58° W. 86 lks. dist.

marked T 22 S R 7 E S 28 B T

Land, mountainous.

Soil, rocky and adobe; 4th rate.

Timber, cedar and pinon on 23.00 chs.

Land mountainous or heavily timbered 80.00 chs.

East on random line bet. secs. 27 and 34.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.99 Intersect the cor. of secs. 26, 27, 34 and 35.

Thence I run

West on random line bet. secs. 27 and 34.

Over mountainous land; soil clay and rocky.

6.00 Base of mountainous land, bears NE and S 80° W.

Thence over steep rocky land facing SE and S.; over series of ridges and hollows, putting S.

35.00 Descend to bench.

38.50 Base of mountainous land, bears NW. and S 80° E.39.99 $\frac{1}{2}$ Point for $\frac{1}{4}$ sec. cor falls in wash and cannot be permanently set; therefor at40.30 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for witness cor. to the $\frac{1}{4}$ sec. cor., marked on brass cap

T 22 S R 7 E S 27 in N.

W C $\frac{1}{4}$ in E. andS 34 in S.; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.

44.00 Base of mesa, bears N and S.; ascend abruptly 300 ft. over E face.

54.40 Top of ascent and E edge of mesa, bears N and S.

Enter cedar and pinon, bears N. and S.

Subdivision of T 22 S., R 7 E.

chains	Thence gradually descend over mesa top.
79.99	The cor. of secs. 27, 28, 33 and 34. Land, mountainous. Soil, rocky and clay; 4th. rate. Timber, cedar and pinon on 25.60 chs. Land mountainous or heavily timbered 79.99 chs. July 7: At this sec. cor. I set off $22^{\circ} 38\frac{1}{4}'$ N. on the decl. arc; and, at 12h.05m. p.m. I observe the sun on the meridian; the resulting lat. is $38^{\circ} 52'$.
	N. $0^{\circ} 02'$ W. bet. secs. 27 and 28.
	Over broken mountainous land, gradually descend thru dense cedar and pinon .
21.00	Leave timber, bears NE. and SW.
28.50	Wash, course NE. Thence over broken land facing E.
39.79	The point for $\frac{1}{4}$ sec. cor. will fall in wash. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for witness cor. to the $\frac{1}{4}$ sec. cor., marked on brass cap T 22 S R 7 E W C $\frac{1}{4}$ in N. S 27 in E. and S 28 in W.; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
40.00	Point for $\frac{1}{4}$ sec. cor. falls in wash, in hollow 100 ft. deep, course SE. Ascend land facing nearly W.
48.00	Ridge, bears E. and W.
50.75	Head of hollow, course E., bears E. of line 50 lks. Ascend 75 ft. to
57.00	Top of ascent and bench, bears E and W.; enter cedar and pinon.
64.00	Leave bench and timber, bears E. and W. Descend
73.00	Leave rocky land, enter clay bad lands, bears E. and W. Descend abruptly 125 ft.

Subdivision of T. 22 S., R 7 E.

chains	
77.90	Gulch, course NW. Ascend steep land facing SW.
80.00	On W. slope of clay spur. Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 21, 22, 27 and 28, marked on brass cap T. 22 S S 21 in NW, R 7 E S 22 in NE, S 27 in SE, and S 28 in SW. quadrant; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable. Land, mountainous. Soil, rocky and clay; 4th rate. Timber, cedar and pinon on 28.00 chs.
	East on random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line 9 lks. S. of cor. of secs. 22, 23, 26 and 27. Thence I run S. 89° 56' W. on true line bet. secs. 22 and 27. Over broken mountainous land.
4.00	Base of clay butte, bears NW. and S.; ascend
6.00	Top of ascent on N. slope, 50 ft. above base. Descend
8.00	W foot of butte, bears NE. and S. Thence across clay flat.
14.80	Wash, course NE.
18.00	Base of spur, bears N. and SE.; ascend E. slope
22.50	High spur, projects N.; descend land facing NW.
27.40	Hollow, course N.; ascend
36.50	Bench and enter timber, bears N. and S.
39.99	Set an iron post, 3 ft. long, 1 in. dia., 25 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 22 on N.

Subdivision of T. 22 S., R 7 E.

chains

and S 27 on S. half; from which

A pinon, 9 ins. diam., bears N $83\frac{1}{2}^{\circ}$ E. 156 lks. dist.marked $\frac{1}{4}$ S 22 B TA pinon, 14 ins. diam., bears S $62\frac{1}{2}^{\circ}$ W. 259 lks. dist.marked $\frac{1}{4}$ S 27 B T

July 7, 1910

July 8 : AT 7h. 05m. a.m. l.m.t. I set off $38^{\circ} 53'$ on the lat. arc; $22^{\circ} 34\frac{1}{4}'$ N. on the decl. arc; and determine a meridian with the solar at the $\frac{1}{4}$ sec. cor bet. 22 & 27.

Thence I run

S. $89^{\circ} 56'$ W.

46.40 Wash, drains N.; leave timber, bears N. and S.

56.00 Enter hills, bears N. and S.; ascend

60.50 Ridge, bears N. and S.; huge boulder on line.

70.10 Wash, course N.

78.00 Ridge, bears N. and S.; descend.

79, 98 The cor of secs. 21, 22, 27 and 28.

Land, mountainous.

Soil, rocky and clay; 4th rate.

Timber, cedar and pinon on 10 chs.

Land mountainous or heavily timbered 79.98 chs.

N. $0^{\circ} 02'$ W. bet. secs. 21 and 22.

Over mountainous land.

6.50 Ridge, bears E and W.; descend 100 ft. to

11.00 Wash, 15 lks. wide, course NE.

Ascend land facing SW. 150 ft.

24.50 Ridge, bears E. and SW.; thence gradually descend over bench, thru cedar and pinon.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 21 on W. and S 22 on E. half; from which

A pinon, 14 ins. diam., bears S $37\frac{1}{2}^{\circ}$ E. 250 lks. dist.marked $\frac{1}{4}$ S 22 B TA pinon, 10 ins. diam., bears S $21\frac{1}{2}^{\circ}$ W. 35 lks. dist.

Subdivision of T 22 S., R 7 E.

	chains	
		marked $\frac{1}{4}$ S 21 B T
		Thence gradually ascend over clay bench land.
42.00		Leave timber, bears E. and W.
60.00		Base of high mesa, bears E. and W.
		Ascend up steep rocky S. slope of mesa, over huge boulders.
80.00		Point for sec. cor. falls on steep rocky ground where it cannot be perpetuated.
		For description of cor. see line bet. secs. 15 and 16.
		Set temp. sec. cor. for secs. 15, 16, 21 and 22.
		Land, mountainous.
		Soil, rocky and clay; 4th rate.
		Timber, cedar and pinon on 17.50 chs.
		Land mountainous 80.00 chs.
		<hr/>
		N. 89° 56' E. on random line bet. secs. 15 and 22.
40.00		Set temp. $\frac{1}{4}$ sec. cor.
80.16		Intersect the N. and S. line, 2 lks N. of cor of secs. 14, 15, 22 and 23.
		Thence I run
		S. 89° 57' W. on true line bet. secs. 15 and 22.
		Over broken mountainous land.
.40		Wash, drains SE.
14.30		Wash, drains SE.
18.00		Ascend 100 ft. to
21.00		Top of ascent and bench, bears N. and S.
		Thence across bench and clay soil.
30.50		Boulder, 15 ft. high, and 30 ft. across on line.
34.00		Base of high mesa, bears NE. and S 60° W.
		Ascend along S. face over boulders.
40.08		Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 15 on N. and S 22 on S. half; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
		Continue up steep S. face of mesa
80.16		The temp. cor. of secs. 15, 16, 21 and 22.
		Land, mountainous.

Subdivision of T. 22 S., R. 7 E.

chains.

Soil, rocky, 4 th. rate.

Land, mountainous and exceptionally difficult to survey

46. chs.

Timber, cedar and pinon.-----

From temp. cor.

N. 0° 02' W., bet. secs. 15 and 16.

Over mountainous land; ascend steep S. face of mesa, over huge boulders, through scattering timber.

4.05 Ledge, 80 ft. high, bears E. and W.

4.25 Top of high mesa, 550 ft. above base, bears E. and W.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground and mound of stone for witness cor. to secs. 15, 16, 21 and 22, marked on brass cap

T. 22 S R 7 E S 16 S 15 on N. half,

S 21 S 23 on S. half with W C., from which

A pinon, 8 ins. diam., bears N. 49½° E., 114 lks. dist.; marked W C T 22 S R 7 E S 15 B T

A pinon, 6 ins. diam., bears N. 52¾° W., 73 lks. dist., marked W C T 22 S R 7 E S 16 B T.

and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.

5.00 Enter dense forest of cedar and pinon. bears E. and W.

Gradually ascend over broken mesa top.

26.00 Wash, 25 lks. wide, course NW., ascend 25 ft. to

33.00 Low ridge, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 16 on W. half and S 15 on E. half; from which

A pinon, 7 ins. diam., bears S. 60° W., 31 lks. dist., marked ¼ S 16 B T

A pinon, 7 ins, diam., bears S. 68½° E., 43 lks. dist., marked ¼ S 15 B T.

42.75 Wash, 30 lks. wide, course NW.

45.25 Flat top ridge, bears NW. and SE.

50.00 Descend steep land facing NE.

65.00 Base of descent, bears NW. and SE, ascend

71.00 Spur projects E

Subdivision of T 22 S R 7 E

chains
80.00

Set an iron post, 3 ft. long , 2 ins in dia., 24 ins. in the ground for cor. of secs. 9,10,15 and 16, marked on brass cap

T22S S 9 in NW.,
R 7 E S 10 in NE.,
S 15 in SE., and
S 16 in SW. quadrant, from which

A pinon, 11 ins. diam., bears N. 29°W., 139 lks. dist.,
Marked T 22 S R 7 E S 9 B T.

A pinon, 9 ins. diam., bears N. 20½° E., 199 lks. dist.,
marked T 22 S R 7 E S.10 B T.

and raise a mound of stone, 2 ft. base 1½ ft. high W. of cor. Pits impracticable. No other trees within limits
Land, mountainous,

Soil, rocky; 4 th. rate.

Timber, dense cedar and pinon on 75.25 chs.

Land, mountainous and heavily timbered 80.00 chs.

July 8 , 1910

July 9: At 7 h. 05m.a.m.l.m.t., I set off 38°54¾'N., on the lat. arc; 22°27' N. on the decl. arc; and determine a mer. with the solar at the cor. of secs.9,10,15 and 16
Thence I run

N.89°57' E., on a random line bet. secs. 10 and 15

40.00 Set temp. ¼ sec. cor.

80.24 Intersect N. and S. line 2lks S. of the temp. cor. of secs. 10,11,14 and 15. I destroy temp. cor. and run S. 89° 56' W., on true line bet. secs. 10 and 15.

Ascend abruptly over ledges.

5.20 Ledge, 100 ft. high, bears N.20°W. and S. 30° E.

5.43 On top of high mesa, 500 ft. above base

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins.in a mound of stone 5 ft. base, 3 ft. high, for witness cor. to secs 10,11,14 and 15, marked on brass cap W C with T 22 S R 7 E S 10 S 11 on N. half and S 15 S 14 on S. half, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Impossible to set post in ground

Thence over broken mesa top, through dense forest of

Subdivision of T. 22 S., R 7 E.

chains	
	cedar and pinon.
40.12	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 10 on N. half and S 15 on S. half; from which A pinon, 8 ins. diam., bears S. $4\frac{1}{2}^{\circ}$ W., 52 lks. dist., marked $\frac{1}{4}$ S 15 B T A pinon, 9 ins. diam., bears N. $16\frac{3}{4}^{\circ}$ E., 25 lks. dist. marked $\frac{1}{4}$ S 10 B T.
46.83	Begin steep descent of 240 ft. into hollow, bears NW. and SE.
62.63	Wash, in hollow, 30 lks. wide, course NW.
9.	Thence overland facing N.
74.53	Wash, 30 lks. wide, course NW., ascend 125 ft. to
80.24	The cor. of secs. 9, 10, 15 and 16 Land, mountainous. Soil, rocky: 4 th. rate. Timber, dense cedar and pinon. Land, mountainous and heavily timbered 80.24 chs. ----- N. $0^{\circ} 02'$ W., bet. secs. 9 and 10 Over broken mountainous land thru forest of cedar and pinon. ascend
4.00	Top of ascent, Bears NE. and SW. descend
4.90	Descend over land facing NE.
30.00	Base of descent and draw, course E. Ascend land facing SE.
36.00	Top of ascent and mesa, 150 ft. above base, bears NE and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 9 on W. half and S 10 on E. half; from which A pinon, 9 ins. diam., bears S. 35° E., $14\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 10 B T. A pinon, 15 ins. diam., bears S. 76° W., 68 lks. dist., marked $\frac{1}{4}$ S 9 B T.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 3, 4, 9 and 10, marked on brass cap

Subdivision of T. 22 S., R. 7 E.

chains

T 22 S S 4 in NW.,

R 7 E S 3 in NE.,

S 10 in SE. and

S 9 in SW. quadrant, from which

A pinon, 13 ins. diam., bears N. $20\frac{3}{4}^{\circ}$ E., 112 lks. dist.,
marked T 22 S R 7 E S 3 B T

A pinon, 8 ins. diam., bears S. $19\frac{1}{2}^{\circ}$ E., 16 lks. dist.,
marked T 22 S R 7 E S 10 B T.

A pinon, 13 ins. diam., bears S. 25° W., 42 lks. dist.,
marked T 22 S R 7 E S 9 B T.

A pinon, 10 ins. diam., bears N. $45\frac{1}{2}^{\circ}$ W., 87 lks. dist.,
marked T 22 S R 7 E S 4 B T.

Land broken and rolling.

Soil, rocky: 4 th. rate.

Timber, dense cedar and pinon.

Land mountainous or heavily timbered 80.00 chs.

July 9: At this sec. cor I set off $22^{\circ} 25'$ N. on the
decl. arc; and at 12h.05m.p.m.l.m.t., observe the sun on
the mer; the resulting lat. is $38^{\circ} 55\frac{1}{2}'$.

N. $89^{\circ} 56'$ E. on a random line bet. secs. 3 and 10

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.23 Intersect N. and S. line 2 lks. N. of the cor. of secs. 2,
3, 10 and 11, here stop

Thence I run

S. $89^{\circ} 57'$ W., on true line bet. secs. 3 and 10

Over broken mesa top sloping NW.

16.00 Descend into gulch, bears N; 80° W. and S. 80° E.

24.00 Gulch, 125ft, deep, course N. ascend

25.45 Top of W. side of gulch, bears N and S.

40.11 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 3 on
N, half and S 10 on S. half: from which

A pinon, 10 ins. diam., bears S. $31\frac{1}{2}^{\circ}$ E., 55 lks. dist.,
marked $\frac{1}{4}$ S 10 B T.

Subdivision OF T 22 S., R 7 E.

chains	A pinon, 10 ins. diam., bears N $26\frac{1}{4}^{\circ}$ E. 38 lks. dist., marked $\frac{1}{4}$ S 3 B T
51.28	Ridge, bears N. and S.; descend.
57.00	Gulch, 150 ft. deep, course N.; ascend
72.00	Top of ascent and mesa, bears N. and S.
80.23	The cor. of secs. 3, 4, 9 and 10. Land, mountainous. Soil, rocky; 4th rate. Timber, dense cedar and pinon on mile. Land mountainous and heavily timbered 80.23 chs.
	Having run the N. bdy. and knowing there will be a closing cor. I run N. $0^{\circ} 02'$ W. on true line bet. secs. 3 and 4. Over broken mountainous land, thru dense cedar and pinon
18.15	Wood road, NW. and S 20° E.
20.00	N. edge of mesa, bears NW. and SE. Descend 200 ft. down land facing NE. into gulch.
29.40	Gulch, course NW. for 10chs. thence N. Ascend abruptly. 200 ft. over ledges.
35.00	Top of ascent and point of mesa, projects W. 1 ch., NW & SE
36.50	Leave mesa, descend steep rocky land along E. side of gulch
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 4 on W. and S 3 on E. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Continue descent along E. side of gulch.
63.00	Bottom of gulch and wash, course N. 15° E. Ascend 200 ft. over land facing SE.
74.50	Top of ascent and mesa, bears N 20° E. and S 20° W. Thence gently descend over top of mesa.
88.39	Intersect the N. bdy. of tp. 1.94 chs. E. of cor. of secs. 3, 4, 33 and 34 heretofore described. Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for closing cor. for secs. 3 and 4., marked on

Subdivision of T 22 S., R 7 E.

chains

brass cap

T 21 S R 7 E S 33 S 34 CC on N. half

S 3 in SE. and S 4 in SW. quadrant; from which
A cedar, 14 ins. diam., bears S 36° E. 21 lks. dist.,
marked T 22 SR 7 E S 3 B T.

A piñon, 10 ins. diam., bears S 18 $\frac{3}{4}$ ° W. 170 $\frac{1}{2}$ lks. dist
marked T 22 S R 7 E S 4 B T

I destroy all marks on old sec. cor pertaining to secs. 3 & 4
Land, mountainous.

Soil, rocky; 4th rate.

Timber, cedar and pinon. on mile

Land mountainous or heavily timbered 88. 39 chs.

July 9, 1910.

July 10: At 8h. 5m. a.m. l.m.t. I set off 38° 51 $\frac{1}{4}$ ' on the
lat. arc; 22° 19 $\frac{1}{2}$ ' N. on the decl. arc; and determine a
meridian with the solar at the cor. of secs. 4, 5, 32 and
33, on S. bdy. heretofore described.

Thence I run

N. 0° 03' W. bet. secs. 32 and 33.

Over hilly clay land.

- 21.00 Enter boulders, bears NE. and SW.
- 27.00 Leave boulders, bears NW. and SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 32 on W.
and S 33 on E. half; raise a mound of stone 2 ft. base,
1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- 45.75 Thence over bench, thru scattering cedars, bears E and W.
- 51.00 Leave scattering cedars, bears NE. and SW.
- 73.75 Wash, drains NE.
- 79.00 Wash, 10 lks. wide, drains E.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
ground for cor. of secs. 28, 29, 32 and 33, marked on
brass cap
T 22 S S 29 in NW,
R 7 E S 28 in NE,

Subdivision of T 22 S., R 7 E.

chains

S 33 in SE and

S 32 in SW quadrant; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Note: There are shallow coal outcroppings about cor.

Land, hilly and broken.

Soil, clay and rocky; 3rd rate

Timber, few scattering cedars on 5.25 chs.

Mountainous land on 80.00 chs.

East on random line bet. secs. 28 and 33.

40.00 Set temp. $\frac{1}{4}$ Sec. cor.

80.04 Intersect the N and S line, 2 lks N. of cor. of secs. 27, 28, 33 and 34.

Thence I run

N. $89^{\circ} 59'$ W. on true line bet. secs. 28 and 33.

Over hilly, broken land, thru cedar and pinon.

6.50 Leave timber, bears N. and S.

27.00 Hollow, course S. ascend

31.25 Top of bench, bears N. and SW.

34.00 Descend from bench, bears N. and SW.

40.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 28 on N. and S 33 on S. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

55.00 Low ridge, bears NE. and SW.

62.35 Hollow, 50 ft. deep, course S.

70.00 Hollow, 40 ft. deep, course S.

75.55 Wash, course S.

80.04 The cor of secs. 28, 29, 32 and 33.

Land, hilly and broken.

Soil, rocky and clay; 3rd rate.

Timber, cedar and pinon on 60.50 chs.

July 10: At this sec. cor. I set off $22^{\circ} 17\frac{1}{2}'$ N. on the decl. arc; and, at 12h. 5m. p.m. l.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 52'$.

Subdivision of T 22 S., R 7 E.

chains

N. 0° 03' W. bet. secs. 28 and 29.

Over rolling bench land. clay soil.

12.00

Base of high mesa, bears NE. and SW.

Thence up steep S. face over huge boulders.

37.68

Top of mesa and ledges, 500 ft. above base, bears N 20° E and SW.; thence over rolling mesa top, thru forest of cedar and pinon.

40.00

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground and a mound of stone, marked on brass cap $\frac{1}{4}$ S 29 on W. and S 28 on E. half; from whichA pinon, 16 ins. diam., bears S 61 $\frac{1}{2}$ ° E. 74 lks. dist.,
marked $\frac{1}{4}$ S 28 B T

A pinon, 8 ins. diam., bears N 30° 10' W. 94 lks. dist.,

marked $\frac{1}{4}$ S 29 B T. Impossible to set post more than 12 ins. in ground.

80.00

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29., marked on brass cap

T 22 S S 20 in NW,

R 7 E S 21 in NE,

S 28 in SE and

S 29 in SW. quadrant; from which

A pinon, 6 ins. diam., bears N 14° E. 48 lks. dist.,

marked T 22 S R 7 E S 21 B T

A pinon, 8 ins. diam., bears S 55 $\frac{1}{4}$ ° E. 50 lks. dist.,

marked T 22 S R 7 E S 28 B T

A pinon, 7 ins. diam., bears S 20 $\frac{1}{2}$ ° W. 138 lks. dist.,

marked T 22 S R 7 E S 29 B T

A pinon, 14 ins. diam., bears N 53 $\frac{1}{2}$ ° W. 72 lks. dist.,

marked T 22 S R 7 E S 20 B T

Land, rolling and mountainous.

Soil, rocky and clay; 4th rate.

Timber, cedar and pine.

Land mountainous or heavily timbered 68.00 chs.

Subdivision of T. 22 S., R. 7 E.

Chains.

S. 89° 59' E. on a random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.05 Intersect the N. and S. line, 2 lks. S. of cor. of secs. 21, 22, 27, and 28. Thence I run

West on true line bet. secs. 21 and 28,

Over mountainous land. Descend steep clay slope facing SW.

2.10 Hollow, course NW. Thence along land facing nearly N.

9.90 Hollow, course N.; ascend 100 ft. up E. slope.

12.00 Ridge, bears N. and S.

23.20 Hollow, 125 ft. deep, course NW.

34.00 Ridge, bears N. and S.

36.90 Hollow, course SE.

40.02 $\frac{1}{2}$ On N. slope of ridge,

Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 21 on N. and S 28 on S. half; from which

A pinon, 6 ins. diam., bears S. 85 $\frac{1}{2}$ ° E. 161 lks. dist. marked $\frac{1}{4}$ S 28 B T

No other trees within limits; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.

44.00 Clay ridge, bears N. and SE.

50.00 Base of high mesa, bears N. and S.

Thence up steep E. face of mesa; over huge boulders.

72.00 Top of high mesa, 550 ft. above base, bears N. and S. 20° W. Thence gradually descend through dense cedar and pinon.

80.05 The cor. of secs. 20, 21, 28, and 29.

Land, mountainous.

Soil, rocky and clay; 4th rate.

Timber, dense cedar and pinon on 8.00 chs.

Land, mountainous, heavily timbered and exceptionally difficult to survey 30.05 chs.

July 10, 1910.

Subdivision of T. 22 S., R. 7 E.

Chains. July 11, 1910: At 8 h. 5 m. a. m. l. m. t., I set off 22° 12' N. on the decl. arc; 38° 53' on the lat. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28, and 29. Thence I run

N. 0° 03' W. bet. secs. 20 and 21,

Over broken mesa top, sloping NW.; through dense cedar and pinon.

40.00 Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap $\frac{1}{2}$ S 20 on W. and S 21 on N. half; from which

A pinon, 10 ins. diam. bears S. 37 $\frac{1}{2}$ ° E. 126 lks. dist. marked $\frac{1}{2}$ S 21 B T

A pinon, 12 ins. diam., bears N. 81 $\frac{1}{2}$ ° W. 102 lks. dist. marked $\frac{1}{2}$ S 20 B T

74.00 Descend abruptly, 125 ft. into canyon.

77.00 Base of canyon; course N. 80° W.

Ascend over series of ledges.

79.90 Base of 50 ft. ledge, bears N. 80° W. and S. 80° E.

Point for sec. cor. falls on ledge; therefore at this point

Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for witness cor. to secs. 16, 17, 20, and 21, marked on brass cap

T 22 S R 7 E
S 17 S 16
 °WC

S 20 S 21 from which

A pinon, 12 ins. diam. bears S. 53 $\frac{3}{4}$ ° E. 33 lks. dist. marked W C T 22 S R 7 E S 21 B T

A pinon, 5 ins. diam. bears S. 69 $\frac{3}{4}$ ° W. 22 lks. dist. marked W C T 22 S R 7 E S 20 B T

A pinon, 8 ins. diam., bears N. 75° W. 4+ lks. dist. marked W C T 22 S R 7 E S 17 B T

No other bearing trees within limits; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.

80.00 Point for cor. of secs. 16, 17, 20, and 21; cor. not set. Land, broken and mountainous.

Subdivision of T 22 S., R 7 E.

chains

Soil, rocky; 4th rate.
 Timber, cedar and pinon on mile.
 Land, mountainous or heavily timbered 80.00 chs.

From true cor. point I run

East on random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

50.00 To E. edge of mesa and high ledge. to a void chaining
 down steep face of mesa. I offset

North, 4.25 chs.; then, on offset line

East, 30.05 chs. or (counted from sec. cor. point)

80.05 Intersect 2 lks. N. of the witness cor. of secs. 15, 16,
 21 and 22.

Thence I run (On offset line)

N. $89^{\circ} 59'$ W. on true line bet. secs. 16 and 21.

Along S. edge of mesa, thru dense cedar and pinon.

30.05 Offset 4.25 chs. to true line; thence N $89^{\circ} 59'$ W.

40.02 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S. 16 on N. and S 21 on
 S. half; from which

A pinon, 14 ins. diam., bears N 78° W. 118 lks. dist.,
 marked $\frac{1}{4}$ S 16 B T

A pinon, 9 ins. diam., bears S 3° E. 54 lks. dist.,
 marked $\frac{1}{4}$ S 21 B T

43.50 Descend into gulch, bears NW. and SE.

46.20 Gulch, 100 ft. deep, course NW.; ascend.

48.00 Top W. side of Gulch, bears NW. and SE.

79.25 Top ledges, bears N 80° W. and S 80° E.

Descend 45 ft. to

80.05 The true point for ^{cor.} secs. 16, 17, 20 and 21.

Land, broken, mountainous.

Soil, rocky; 4th rate.

Timber, dense cedar and pinon.

Land mountainous and heavily timbered 80.05 chs.

N. $0^{\circ} 05'$ W. bet. 1890s.

Subdivision of T 22 S., R 7 E.

chains

N. 0° 03' W. bet. secs. 16 and 17:

From true cor. point.

Over broken mountainous land.

- .45 Top of ledges, bears N. 80° W and S 80° E.
- 10.00 Descend into canyon.
- 19.00 Canyon, 150 ft. deep, course NW.; ascend.
- 33.50 Low ridge, bears NW. and SE.
Descend 75 ft. to
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins, in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 17 on W. and S 16 on E. half; from which
- A pinon, 6 ins. diam., bears S 37° E. 44 lks. dist.,
marked $\frac{1}{4}$ S 16 B T
- A pinon, 6 ins. diam., bears N 83 $\frac{1}{4}$ ° W. 12 lks. dist.,
marked $\frac{1}{4}$ S 17 B T
- 43.75 Descend abruptly 125 ft. into canyon
- 45.90 Canyon, course W.
Ascend 150 ft. to
- 49.00 Top of ascent and N. side of canyon, bears E and W.
- 49.75 Wood road, bears E. and W.
- 75.50 Gulch, drains W,
- 76.50 Top of 20 ft. ledge, bears NW. and SE.; descend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17., marked on brass cap
- T 22 S S 8 in NW,
R 7 E S 9 in NE,
S 16 in SE. and
S 17 in SW. quadrant; from which
- A pinon, 12 ins. diam., bears N. 50 $\frac{3}{4}$ ° E. 94 lks.
dist. marked T 22 S R 7 E S 9 B T.
- A pinon 7 in. in dia. bears S 82 $\frac{1}{4}$ ° E 71 lks. dist.
mkd. T 22 S R 7 E S 16 B T.
- A pinon, 7 ins. diam. bears S 42° W. 54 lks. dist.
mkd. T 22 S R 7 E S 17 B T.

Subdivisions T 22 S., R. & E.

chains

A pinon, 11 ins. in diam. bears N.62½°W. 26 lks. dist., marked T 22 S R 7 E S 8 B T.

Land, mountainous.

Soil, rocky; 4th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 80,00 chs

July 11, 1910.

July 12: At 7h. 05m. a.m. l.m.t. I set off 38° 54½' N. on the lat. arc; 22° 04½' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17

Thence I run S.89° 59' E., on a random line bet secs. 9 and 16

40.00

Set temp. ¼ sec. cor.

80.07

Intersect N. and S. line 2 lks. N. of the cor. of secs. 9, 10, 15, and 16 here set cor. described.

Thence I run N.89° 58' W. on true line bet. secs. 9 and 16.

Over mountainous land thru forest of cedar and pinon

Ascend

0.60

Top of ascent, bears N.10°E. and S. 10° W.

40.03½

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 9 on N. half and S 16 on S. half; from which

A pinon, 13 ins. diam. bears N.19¼°W. 78 lks. dist. marked ¼ S 9 B T

A pinon, 9 ins. diam. bears S.51¼° E. 78 lks. dist. marked ¼ S 16 B T.

44.50

Begin steep descent, bears NW. and SE.

52.60

Wash, course N.

59.50

Same wash at bend, course NW.

Ascend.

63.50

Low ridge, bears N. and S.

80.07

The cor. of secs. 8, 9, 16 and 17.

chains

Land, mountainous. 11 mi. long 11 miles A. 11 miles

Soil, rocky; 4th. rate. 11 miles, 11 miles

Timber, cedar and pinon. 11 miles, 11 miles

Land mountainous and heavily timbered 80.07 chs.

11 miles 11 miles, 11 miles

N.0° 03'W., bet. secs. 8 and 9. 11 miles 11 miles

Over rolling land sloping NW. gradually descending thru forest of cedar and pinon.

5.40 Wash, course N.80°W. 11 miles 11 miles

40.00 Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for 1/4 sec. cor. marked on brass cap 1/4 S 8 on W. half and S. 9 on E. half; from which

A cedar, 10 ins. diam. bears S.61°E. 58 lks. dist.

11 miles marked 1/4 S 8 B T. 11 miles 11 miles

A pinon 11 ins. diam. bears S.80 1/2°W. 152 1/2 lks. dist.

11 miles marked 1/4 S 8 B T. 11 miles 11 miles

56.00 Leave timber and rolling mesa, bears E. and W.

74.00 Wash, 30 lks. wide, 8 ft. deep, course N.80°W.

Thence over nearly level land 11 miles 11 miles

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked on brass cap 1/4 S 8 on W. half and S. 9 on E. half

11 miles 11 miles 11 miles 11 miles

S. 89° 58'E., on a random line bet. secs. 4 and 9

40.00 Set temp. 1/4 sec. cor. 11 miles 11 miles

80.06 Intersect N. and S. line 2 lks. S. of the cor. of secs.

Subdivisions T. 22 S., R. 7 E.

- chains 3, 4, 9 and 10
- Thence I run
- N. 89° 59' W., on a true line bet. secs. 4 and 9
- Descend across mesa top sloping Nw. thru forest of cedar and pinon.
- 40.03 Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 4 on N. half and S 9 on S. half; from which
 - A pinon 10 ins. diam. bears N. 26 $\frac{3}{4}$ ° E. 274 $\frac{1}{2}$ lks. dist. marked $\frac{1}{4}$ S 4 B T
 - A pinon 9 ins. diam. bears S 4 $\frac{3}{4}$ ° W. 151 lks. dist. marked $\frac{1}{4}$ S 9 B T.
- 50.25 Wash, course NW.
- 56.60 Wash, 20 lks. wide, course N., leave timber and base of mesa, bears N. and S.
- 80.06 The cor. of secs. 4, 5, 8 and 9
- Land, rolling.
- Soil, sandy loam and gravelly; 1st. and 3rd. rates.
- Timber, cedar and pinon on 56.60 chs.

- N. 0° 03' W., on a true line bet. secs. 4 and 5.
- Over level land thru high greasewood.
- 28.00 Leave level land and greasewood, bears NE. and W.
- Thence over rolling land
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 5 on W. half and S 4 on E. half; dig pits 18x18x12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, W. of cor.
- 87.71 Intersect N. bdy. of the tp. 3.89 chs. N. 89° 12' E. of the cor of secs. 4, 5, 32 and 33 heretofore described.
- Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground for closing cor. of secs. 4 and 5 marked on brass cap

T 21 S R 7 E S 32 S 33 C C on N. half and

Subdivisions of T 22 S R 7 E

chains

S 4 in SE. and

S 5 in SW. quadrant; dig pits, 24x18x12 ins. on each line, E. and W. 3 ft. east S. of post 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, S. of cor.

Land, rolling and level.

Soil, clay and sandy loam; 2nd and 1st. rates.

No timber.

Undergrowth greasewood on 28.00 chs.

I destroy marks on old cor. pertaining to secs. 4 and 5.

July 12: At the cor of secs. 5, 6, 31 and 32 on the S. bdy. of the tp. heretofore described, I set off 22° 02' N. on the decl. arc; and at 12h. 05m. p.m. l.m.t. observe the sun on the meridian; the resulting lat. is 38° 51 1/4'. Thence I run

N. 0° 03' W., bet. secs. 31 and 32

over mountainous land

13.00 Begin steep ascent over E. face of mesa.

37.00 Enter ledges, bears N. 35° E. and S. 35° W.

40.00 Point for 1/4 sec. cor on ledges, and cannot be set.

40.50 Enter cedar and pinon timber
Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground, for witness cor. to the 1/4 sec. cor. mkd. on brass cap

T 22 S R 7 E on N. half

S 32 on E half and

S 31 on W. half with W C 1/4; from which

A pinon, 14 ins. diam. bears N. 62° W. 174 lks.

dist., marked W C 1/4 S 31 B T

A pinon 11 ins. diam. bears N. 24° E. 120 lks.

dist., marked W C 1/4 S 32 B T.

46.50 Rocky ridge, bears E. and NW.

Descend 100 ft. over land sloping NW

74.20 Draw, course W.

Begin steep rocky ascent over land sloping S.

80.00 Point for cor. on ledge. At a point 5 lks. W. of my

Subdivisions of T. 22 S., R 7 E.

chains

true cor. point, I set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in a mound of earth and stone for witness cor. to secs. 29, 30, 31 and 32, marked on brass cap

T 22 S R 7 E
S 30 S 29
WC.
S 31 S 32

and raise a mound of stone, 2 ft. base 1 1/2 ft. high W. of cor. Impossible to set post 24 ins. in the ground. Land, mountainous.

Soil, rocky; 4th. rate.

Timber cedar and pinon on 40.00 chs.

Land mountainous or heavily timbered 80.00 chs.

From true cor point, I run East, on a random line bet. secs. 29 and 32

40.00 Set temp. 1/4 sec. cor.

80.08 Intersect the N. and S. line 3 lks. N. of the cor. of secs. 28, 29, 32 and 33.

Thence I run

N, 89° 59' W. on true line bet. secs. 29 and 32.

Over rolling bench land.

25.00 Base of mesa, bears NE. and S 30° W.

Thence up precipitous E. face over huge boulders.

40.04 Point for 1/4 sec. cor. falls on steep rocky ground where it cannot be perpetuated.

48.58 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground and a mound of stone, for witness cor. to the 1/4 sec. cor., marked on brass cap

T 22 S R 7 E
S 29
WC 1/4
S 32 ; from which

A pinon, 8 ins. diam., bears N 71° W 83 lks., dist., marked 1/4 S 29 B T W C

A pinon, 9 ins. diam., bears S 61 1/2° W 149 lks., dist., marked 1/4 S 32 B T W C

Subdivision of T 22 S., R 7 E.

- chains
- Thence gradually descend over mesa top, thru dense forest of cedar and pinon.
- 71.30 Edge of mesa, bears N 80° W and SE.
Thence over ledges
- 78.50 Ledge, 30 ft. high, bears NE. and SW.
- 80.08 The true point for ^{cor. of} secs. 29, 30, 31 and 32.
Land, mountainous and rolling.
Soil, rocky and clay; 4th rate.
Timber, cedar and pinon on 31.50 chs.
Land mountainous, heavily timbered and exceptionally difficult to survey 55.00 chs.
- July 12, 1910.
-
- July 13: At 7h. 5m. a.m. l.m.t. I set off 38° 52' on the lat. arc; 21° 56' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32. Having run the W. bdy. of tp. and knowing that closing cors. will be necessary. I run West on a true line bet. secs. 30 and 31.
- 40.00 Overt mountainous land, thru scattering timber.
- 35.15 Ascend small ledges facing SE.
- 4.60 Top of ascent and mesa, bears N 80° E and S 80° W. desc.
- 30.50 Leave mesa, S 80° E and NW. general course S. Leave timber. Descend abruptly over ledges, 250 ft. high.
- 40.00 Point for ¼ sec. cor falls in Draw, course S. therefore at
- 42.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for witness cor. to the ¼ sec. cor., marked on brass cap T 22 S R 7 E S 30 on N.
W C ¼ on E and
S 31 on S.; raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
Thence over adobe land facing S.
- 60.00 Base of descent, 1000 ft. below mesa, and draw, course S. SW.

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Subdivision of T 22 S., R 7 E.

chains	
85.15	<p>Ascend land facing SE.</p> <p>Intersect W. bdy. of tp. 92 lks. S. ^{0°13'E.} of cor. of secs. 25, 30, 31 and 36. heretofore described.</p> <p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for closing cor. of secs. 30 and 31, marked on brass cap</p> <p style="padding-left: 40px;">T 22 S in N. half, S 30 R 7 E. in NE. S 31 in SE. quadrant, S 25 C C S 36 R 6 E in W. half; raise a mound of stone, 2 ft. base, 1½ ft. high E. of cor. I destroy all mks on old cor pertaining to secs 30 and 31 Land. mountainous.</p> <p>Soil, rocky and clay; 4th rate.</p> <p>Timber, scattering cedar and pinon on 30.50 chs.</p> <p>Land mountainous 85.15 chs.</p>
1.50	<p style="text-align: center;">N. 0° 03' W. bet. secs. 29 and 30.A</p> <p>Ascend over rocky mountainous land facing S. thru forest of cedar and pinon.</p> <p>Top ledges, 75 ft. above sec. cor., bears E. and W.</p> <p>Leave rocky land, gradually ascend</p>
6.00	<p>Top of ascent, bears E. and W. thence descend over NW. slope</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap. ¼ S 30 on W. half and S 29 on E. half; from which</p> <p style="padding-left: 40px;">A pinon, 11 ins. diam. bears N. 68° E., 101 lks. dist. marked ¼ S 29 B T.</p> <p style="padding-left: 40px;">A cedar, 22 ins. diam. bears S 55½° W. 57 lks. dist. marked ¼ S 30 B T.</p>
58.00	<p>Wash, course W.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins in a mound of earth and stone for cor. of secs. 19, 20, 29 and 30, mkd. on brass cap</p> <p style="padding-left: 40px;">T 22 S S 19 in NW.,</p>

Subdivisions T 22 S., R. 7 E.

chains

R 7 E S 20 in NE.

S 29 in SE., and

S 30 in SW. quadrant; from which

A pinon, 16 ins. diam. bears N. $75\frac{1}{2}^{\circ}$ E. 119 $\frac{1}{2}$ lks.

mkd. T 22 S R 7 E S 20 B T.

A pinon 10 ins. diam. bears S. $12\frac{1}{2}^{\circ}$ E. 140 lks.

dist., mkd. T 22 S R 7 E S 29 B T.

A pinon 9 ins. diam. bears S. $62\frac{1}{4}^{\circ}$ W. 125 lks. dist.

mkd T 22 S R 7 E S 30 B T.

A pinon 10 ins. diam. bears N. 52° W. 26 lks. dist.

mkd. T 22 S R 7 E S 19 B T.

Land mountainous.

Soil, gravelly and rocky; 4th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 80.00 chs.

July 13: At this sec. cor. I set off $21^{\circ} 53\frac{1}{2}'$ N. on the decl. arc; and at 12h. 05 m.p.m. l.m.t. observe the sun on the meridian; the resulting lat. is $38^{\circ} 53'$.

S. $89^{\circ} 59'$ E., on a random line bet. secs. 20 and 29.

40.00 set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line 2 lks. N. of the cor. of secs. 20, 21, 28 and 29 here the line is established.

thence I run

N. $89^{\circ} 58'$ W., on true line bet. secs. 20 and 29

Gradually desc. over rolling land sloping NW. thru dense forest of cedar and pinon.

40.01 Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 20 on N. half and S 29 on S half; from which

A pinon 16 ins. diam. bears N. 6° E. 95 lks. dist.

mkd. $\frac{1}{4}$ S 20 B T.

A pinon, 14 ins. diam. bears S. 48° E. 42 lks. dist.

mkd $\frac{1}{4}$ S 29 B T.

80.03 The cor of secs. 19, 20, 29 and 30.

Subdivisions T. 22 S., R. 7 E.

chains

Land, rolling.
Soil, gravelly; 3rd. rate.
Timber, pinon and cedar.

Heavily timbered land 80.02 chs.

40.00 West, on a true line bet. secs. 19 and 30
over broken land, thru dense cedar and pinon
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19
on N. half and S 30 on S. half; from which

A pinon, 12 ins. diam. bears N. $65\frac{1}{2}^{\circ}$ E. 17 lks. dist.
mkd $\frac{1}{4}$ S 19 B T.

A pinon 8 ins. diam. bears S $38\frac{1}{2}^{\circ}$ W. 53 lks dist.
mkd $\frac{1}{4}$ S 30 B T

62.75 Top of ledge 15 ft. high, bears N. and S.

Descend 75 ft.

68.00 Enter opening, bears N. and S.

70.45 Wash, course S. 20° W.

Ascend.

80.25 top of ascent, 75 ft. above wash, bears N. and S.

Gradually desc.

85.51 Intersect the W. bdy. of tp. 1.85 chs. S. 0° 13' E., of
the cor of secs. 19, 24, 25 and 30 heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in
a mound of earth and stone, for closing cor. of secs.
19 and 30, marked on brass cap

T 22 S on N. half,

C CS 24 S 25 R 6 E on W. half,

S 19 in NE. and

S 30 R 7 E in SW quadrant; from which

A pinon 8 ins. diam. bears N. 48° E. 150 lks. dist.

mkd. T 22 S R 7 E S 19 B T.

A pinon 8 ins. diam. bears S, 25° E. 47 lks. dist.

mkd T 22 S R 7 E S 30 B T.

I destroy all marks on the old cor pertaining to secs.
19 and 30

Impossible to set post over 12 ins. in the ground.

Subdivisions T. 22 S., R 7 E.

chains

Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber, cedar and pinon.
 Land mountainous and heavily timbered 85.51 chs.
 July 13, 1910.

July 14: At 7h.06m.a.m.l.m.t. I set off $38^{\circ}55'N.$ on the lat. arc; $21^{\circ}47\frac{1}{2}'N.$ on the decl. arc; and determine a mer. with the solar at the cor of secs. 19, 20, 29 and 30 as described.

Thence I run

N. $0^{\circ}03'W.$ bet. secs. 19 and 20

Over mountainous land sloping NW. thru dense forest of cedar and pinon. gradually desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd on brass cap $\frac{1}{4}$ S 19 on W. half and S 20 on E half; from which

A pinon, 7 ins. diam. bears S $73\frac{1}{4}^{\circ}E.$ 40 lks. dist.

Mkd $\frac{1}{4}$ S 20 B T

A pinon, 7 ins, diam. bears, N. $59\frac{1}{4}^{\circ}W.$ 68 lks. dist.

mkd $\frac{1}{4}$ S 19 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of earth and stone for cor of secs. 17, 18, 19 and 20, mkd on brass cap: from which set post over 12 ins

T 22 S S 18 in NW.,

R 7 E S 17 in NE.,

S 20 in SE. and

S 19 in SW. quadrant; from which

A cedar, 10 ins. diam. bears N. $54\frac{3}{4}^{\circ}E.$ $3\frac{1}{2}$ lks. dist.

mkd T 22 S R 7 E S 17 B T.

A pinon, 5 ins. diam., bears. S. $50\frac{1}{2}^{\circ}E$ 47 lks. dist.

mkd. T 22 S R 7 E S 20 B T.

A pinon 10 ins. diam., bears S. $34\frac{3}{4}^{\circ}W.$ $40\frac{1}{2}$ lks. dist.

mkd. T 22 S R 7 E S 19 B T.

Subdivisions T. 22 S., R 7 E.

chains

A pinon, 5 ins. diam., bears N 26 1/2° W. 21 lks. dist.
mkd. T 22 S R 7 E S 18 B T.

Land, mountainous.
Impossible to set post over 12 ins. in the ground.
Soil, rocky; 4th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 80.00 chs.

40.00 S. 89° 58' E., on random line bet. secs. 17 and 20.
set temp. 1/4 sec. cor.

79.96 Intersect N. and S. line 14 lks S. of the true cor.
point of secs. 16, 17, 20 and 21, heretofore described.

Thence I run

S. 89° 56' W., on true line bet. secs. 17 and 20

Over mountainous land thru forest of cedar and pinon.

Descend 150 ft. over land sloping SW.

33.60 Bottom of gulch, course NW.

Thence up steep rocky ascent. 150 ft. to

9.60 Top of ascent, bears NW. and SE.

39.98 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in
the ground, for 1/4 sec. cor. marked on brass cap 1/4 S 17
on N. half and S 20 on S. half; from which

A pinon, 9 ins. diam., bears N. 61 1/4° E. 41 1/2 lks. dist.
mkd. 1/4 S 17 B T.

A pinon 12 ins. diam., bears S. 34 1/2° E. 82 lks. dist.
mkd 1/4 S 20 B T.

41.10 Wash, course NW. ascend

71.50 Ridge, bears N. and S.

79.96 The cor of secs. 17, 18, 19 and 20.

Land, mountainous.

Soil, rocky; 4th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 79. 96 chs.

West, on true line bet. secs. 18 and 19

Gradually desc. over mountainous land sloping NW. thru
dense forest of cedar and pinon.

Subdivisions T 22 S., R. 7 E.

chains
 15.45 Wash, course N., gradually asc.
 26.20 Wood road, bears N. and S.
 27.00 Ridge, bears N. and S.
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 18 on N. half and S 19 on S. half; from which
 A pinon 9 ins. diam., bears S. $11\frac{1}{2}^{\circ}$ W. 55 lks. dist. mkd. $\frac{1}{4}$ S 19 B T.
 A pinon 5 ins. diam., bears N. $63\frac{1}{2}^{\circ}$ W. $51\frac{1}{2}$ lks. dist. mkd. $\frac{1}{4}$ S 18 B T.
 57.75 Begin steep descent, bears N. and S.
 64.00 Base of descent, 175 ft. below top, bears N. and S. Leave timber.
 Thence across hollow.
 68.45 Wash, 20 lks. wide, course S. 10° W.
 71.00 Begin steep ascent over land facing E.
 75.65 Top of ascent, 200 ft. above wash, bears N. and S.
 Enter dense forest of cedar and pinon, gradually descend
 85.67 Intersect the W. bdy of the tp. 2.78 chs. S. $0^{\circ}13'$ E. of the cor of secs. 13, 18, 19 and 24 heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in a mound of earth and stone for closing cor. of secs. 18 and 19, mkd. on brass cap
 T 22 S on N. half,
 S 13 C C S 24 R 6 E on W. half,
 S 18 in NE. and
 S 19 R 7 E in SE. quadrant: from which
 A pinon, 5 ins. diam., bears N. 5° E. 127 lks. dist. mkd. T 22 S R 7 E S 18 B T.
 A pinon, 10 ins. diam., bears S. $60\frac{1}{2}^{\circ}$ E. 72 lks. dist. mkd. T 22 S R 7 E S 19 B T.
 I destroy all mks. on the old cor. pertaining to secs. 18 and 19.: Note: Impossible to set post more than 12 in ground.
 Land, mountainous.
 Soil, rocky; 4th. rate.

Subdivision of T.22 S.; R 7 E

chains

Timber, cedar and pinon.

Land mountainous and heavily timbered 35.67 chs.

July 14: At this sec. cor I set off $21^{\circ} 44\frac{1}{2}' N.$ on the decl arc; and at 12h. 06m.p.m.1.m.t. observe the sun on the meridian; the resulting lat is $38^{\circ} 54'$.

N.0°03'W., bet. secs. 17 and 18.

Over mountainous land descending thru forest of cedar and pinon

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brasscap $\frac{1}{4}$ S 18 on W. half and S 17 on E. half; from which

A pinon 7 ins. diam., bears $S.83\frac{1}{2}^{\circ} E.$ 112 lks.dist. mkd $\frac{1}{4}$ S 17 B T.

A pinon, 12 ins.diam., bears $N.63\frac{1}{2}^{\circ} W.$ 139 lks. dist. mkd. $\frac{1}{4}$ S 18 B T.

45.30 Wash, 15 lks. wide, course NW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground for cor. of secs. 7, 8, 17, and 18, mkd on brass cap

_T22 S S 7 in NW.,

R 7 E S 8 in NE.,

S 17 in SE. and

S 18 in SW. quadrant; from which

A pinon, 12 ins. diam., bears $N.85^{\circ} E.$ 74 lks.dist.

mkd. T 22 S R 7 E S 8 B T.

A pinon, 10 ins. diam., bears $S.47\frac{1}{2}^{\circ} E.$ 106 lks.dist.

mkd. T 22 S R 7 E S 17 B T.

A pinon, 5 ins. diam., bears $S.73\frac{1}{2}^{\circ} W.$ 141 lks.dist.

mkd. T 22 S R 7 E S 18 B T.

A pinon, 10 ins.diam., bears $N.37^{\circ} W.$ 75 lks.dist.

mkd. T 22 S R 7 E S 7 B T.

land, mountainous.

Soil, rocky; 4th. rate.

Timber, cedar and pinon.

Land mountainous and heavily timbered 80.00 chs.

Subdivisions T. 22 S., R. 7 E.

chains

N. 89°56' E., on a random line bet. secs. 8 and 17

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.95 Intersect N. and S. line 2 lks. S. of the cor of secs. 8, 9, 16 and 17

Thence I run

S 89°55' W., on true line bet. secs. 8 and 17

Over rolling land sloping N. thru forest of cedar and pinon.

23.00 Wood road, bears N. and S.

39.97 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd on brass cap $\frac{1}{4}$ S 8 on N. half and S 17 on S. half; from which

A pinon, 12 ins. diam., bears N. 79° E., 29 lks. dist.

$\frac{1}{4}$ S 8 B T.

A pinon, 8 ins. diam. bears S. 3 $\frac{1}{2}$ ° E. 95 lks. dist.

mkd $\frac{1}{4}$ S 17 B T.

64.75 Wash, 20 lks. wide, course NW.

70.80 Wash, course N.

79.95 The cor. of secs. 7, 8, 17 and 18

Land, rolling

Soil, rocky, 4th. rate.

Timber, cedar and pinon.

Heavily timbered land 79.95 chs.

July 14, 1910.

July 15: At 7h. 06m. a.m. I set off 38° 54 $\frac{1}{4}$ ' N. on the lat. arc: 21° 38 $\frac{1}{2}$ ' N. on the decl. arc; and det. a mer. with the solar at the cor. of secs. 7, 8, 17 and 18

Thence I run; through forest of cedar and pinon.

West., on a true line bet. secs. 7 and 18

11.00 Wash, course N.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd on brass cap $\frac{1}{4}$ S 7 on N. half and S 18 on S. half; from which

Subdivision of T.22 S. E. 7 E.

chains

A pinon, 13 ins. diam., bears S.71° E., 30 lks. dist., marked $\frac{1}{4}$ S 18 B T

A pinon, 9 ins. diam., bears N. 46 $\frac{1}{2}$ ° W., 25 lks. dist., marked. $\frac{1}{4}$ S 7 B T

55.90 Wood road, bears N.20° W. and S.20° E.

82.30 Wood road, bears N. 10° W. and S.

85.92 Intersect W. bdy. of the tp. 3.75 chs. S. 0° 13' E. of the cor. of secs. 7, 12, 13 and 18 heretofore described

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins in a mound of earth and stone for closing cor. of ~~secs.~~ 7 and 18 marked on brass cap

T 22 S on N. half,

S 12 C C S 13 R 6 E on W. half,

R 7 E S 7 in NE. and

S 18 R 7 E in SE quadrant, from which

A pinon, 9 ins. diam. bears N. 83° E., 43 lks. dist., marked. T 22 S R 7 E S 7 B T

A pinon, 5 ins. diam., bears S. 18 $\frac{3}{4}$ ° E., 81 lks. dist., marked T 22 S R 7 E S 18 B T.

I destroy all marks on old cor pertaining to secs, 7 & 18.

Impossible to set post in the ground

Land, rolling.

Soil, rocky: 4th. rate.

Timber, cedar and pinon.

Timbered land 85.92 chs.

N. 0° 03' W., bet. secs. 7 and 8

Descend over rolling land sloping N. through dense forest of cedar and pinon.

39.00 Leave timber, bears E. and W. Enter level land.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 7 on W. half and S 8 on E. half, from which

A pinon, 5 ins. diam., bears S. 13 $\frac{1}{2}$ ° E. 134 lks. dist., mkd. $\frac{1}{4}$ S 8 B T

A pinon, 7 ins. diam., bears S. 38 $\frac{1}{2}$ ° W. 139 $\frac{1}{2}$ lks. dist., mkd. $\frac{1}{4}$ S 7 B T

50.24 Wash, 15 lks. wide, course N. 60° W.

71.00 Enter plowed land, bears E. and W.

SUBDIVISION OF T. 22 S., R. 7 E.

Chains

78.00 Leave plowed land, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 5, 6, 7, and 8, mkd. on brass cap
 T 22 S S 6 in NW.,
 R 7 E S 5 in NE.,
 S 8 in SE., and
 S 7 in SW. quadrant, dig pits 18x18x12 ins., in each sec. 5 1/2 ft. dist., from post, and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
 Land, rolling and level.
 Soil, sandy loam and rocky; 1st and 4th rates.
 Timber, dense cedar and pinon on 39.00 chs.

N. 39°55'E., on a random line, bet. secs. 5 and 8

40.00 Set temp. 1/4 sec. cor.

79.90 Intersect N. and S. line 2 lks. N. of the cor. of secs. 4, 5, 8 and 9. Thence I run

S. 89°56'W., on true line, bet. secs. 5 and 8

Over level land through undergrowth of greasewood.

35.50 Road bears N. and S.

39.95 Set an iron post, 3 ft. long, 1 in. india., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 5 on N. half and S 8 on S. half; dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 2 ft. high, N. of cor.

79.90 The cor. of secs. 5, 6, 7 and 8

Land, level.

Soil, sandy loam; 1st rate. No timber.

Undergrowth, greasewood on 79.90 chs.

July 15: At this sec. cor. I set off 21°35 3/4' N. on the decl. arc, and at 12h 06m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°55 1/2'!

Subdivision of T. 22 S., R 7 E.

chains West on true line, bet. secs. 6 and 7
 Over level land

4.00 Enter plowed field, bears N. and S.

32.00 Leave plowed field, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 6 on N. half and S 7 on S. half., dig pits 18x18x12 ins E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft base, 2 $\frac{1}{2}$ ft. high, N. of cor.

55.00 Wash, 10 lks. wide, 4 ft. deep, course S. 30° W.
 Enter clay soil.

56.80 Road, bears N. 30° E. and S. 20° W., Emery to Rochester.

66.11 Intersect W. bdy. of the tp. 4.68 chs S. 0° 13' E. of the cor of secs. 1, 6, 7 and 12 heretofore described.
 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 6 and 7 marked on brass cap

T 22 S on N. half,
 S 1 CC S 12 R 6 E on W. half
 S 6 in NE. and
 S 7 R 7 E in SE. quadrant, dig pits 24x18x12 ins crosswise on each line, N. and S. 3 ft. and E. of post 7 ft dist.; and raise a mound of earth 4 ft. base, 2 ft. high E. of cor.

I destroy all marks on the old cor. pertaining to secs. 6 and 7.
 Land, level.
 Soil, sandy loam and clay. 1 st. rate.
 Undergrowth, sage brush and shadscale. No timber.

N. 0° 03' W., on true line bet. secs. 5 and 6
 Over nearly level land

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 6 on W. half and S 5 on E. half; dig pits 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor

Subdivision of T. 22 S., R. 7 E.

chains

80.00 Road, bears NE. and SW., Emery to Rochester.

86.54 Intersect W. bdy of the tp. 5.55 chs., N. 89° 17' E., of the cor. of secs. 5, 6, 31 and 32 heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in ground in the ground for

closing cor. of secs. 5 and 6 marked on brass cap

T 21 S R 7 E S 31^{CC} S 32 on N. half,

S 5 in SE. and

S 6 in SW quadrant; dig pits 24x18x12 ins. crosswise on each line, E. and W. 3ft. and S. of post 7 ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high S. of cor.

Land, rolling.

Soil, sandy loam; 1st. rate.

Undergrowth, shade scale. No timber July 15, 1910.

General Description.

This township consists of a high broken mesa, extending northeastward from sec. 31 to sec. 2, and sloping NW toward Castle Valley. The southeast half of this township is broken and mountainous and drains in a southeasterly direction towards the Muddy river. The soil in the SE. half, is alkali, rocky, adobe and some sandy and may be classed as 4 th. rate. The soil on the mesa is all rocky. Level and gently rolling land is found in secs. 4, 5, 6, 7, and 8. It has a general rich sandy loam soil, and capable of producing abundant crops with the aid of irrigation. A dense forest of scrub cedar and pinon is found on the entire mesa while on the lower lands very little vegetation of any kind is found.

Coal outcroppings are found along the high mesa in secs. 2, 11, 14, 15, 21, 22, 28, 29, 31 and 32. and also in the western half of secs. 7 and 18 on the west. bdy. of the tp.

These outcroppings range from 2 to 4 ft. in thickness and from surface indications large deposits underlie the outcroppings. This coal appears in the form of shale on the surface and is of the bituminous order.

General Description.

This land should be laid aside as coal lands.

Alkali seeps are found in secs. 26 and 35. The water is unfit for man or beast and cannot be used for any purpose.

There are no settlers in this township

The desert entry of Arthur L. Steele, in sec. 6. has approximately 80 acres that has been plowed and produced a crop. No other improvements have been made.

The desert entry of Alfred M. Meek, sec5, has approximately 80 acres that has been plowed and produced a crop. No other improvements have been made,

The desert entry of Hale S. Hutchins, secs. 8 and 7 Has approximately 60 acres that has been plowed and produced a crop No other improvements have been made.

The desert entry of Mattison B. Whitney, secs. 5 and 8 has approximately 40 acres that has been under plow. No crops nor any water has been put on this land.

No other improvements have been made.

The plowed fields in above desert entries are now grown up to weeds.

Howard W. Miller

U. S. Deputy Surveyor.

Note:

There being no notary public, or other officer authorized to administer oaths, within a reasonable distance, at the beginning or ending of the surveys embraced in this contract; therefore, in order to save time and expense, we administer the preliminary and final oaths to our assistants ourselves.

Howard W. Miller
Andrew Nelson

U.S. Deputy Surveyors.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W Miller and

Andrew Nelson, United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of subdivision
of T. 22 S., R. 7 E., of the S.L.B. & M., Utah,

showing the respective capacities in which they acted:

Andrew Nelson Chainman.

Fred Wright Chainman.

Ray Bryan Moundman.

Edward Jones Moundman.

Edward Jones Axman.

Edward Jones Axman.

Edward Jones Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W Miller and

Andrew Nelson United States Deputy Surveyor, in surveying all

those parts or portions of the subdivisions of
T. 22 S., R. 7 E.,

of the 1st
Lake Base meridian, State of Utah, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for Utah

Andrew Nelson Chainman.

Fred Wright Chainman.

Ray Bryan Moundman.

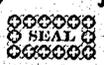
Edward Jones Moundman.

Edward Jones Axman.

Edward Jones Axman.

Edward Jones Flagman.

Subscribed and sworn to before me this 15th
day of July, 1910



Howard W Miller
U.S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Howard W. Miller, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 15 day of January, 1910, ~~190X~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivisional lines of Township 22 South, Range 7 East

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Howard W. Miller
United States Deputy Surveyor

Subscribed by said Howard W. Miller, and sworn to before me) this 17 day of January 1911, ~~1907~~.

Thomas Hull
U. S. Surveyor-General
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES-SURVEYOR GENERAL,

Salt Lake City, Utah, Dec. 19, 1911

The foregoing field notes of the survey of the Subdivisional lines of Township 22 South, Range 7 East of the Salt Lake Base and Meridian, Utah,

executed by Howard W. Miller and Andrew Nelson under their contract No. 316, dated January 15, 1910, ~~190X~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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EX. A-36

" A "

FILED
DEC 31 1910
Heist

E.W.

BOOK A-369

FIELD NOTES

RETRACEMENT AND RESURVEY
OF THE SURVEY OF THE

W E S T and N O R T H B O U N D A R I E S

of

TOWNSHIP NO. 18 SOUTH, RANGE NO. 10 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors,
their

Under his Contract No. 320, dated May 3, 1910

Survey commenced October 17, 1910

Survey completed October 19, 1910

West Point
Pace 3 05 05 ✓
Rate 4 03 91 ✓
with
Rate 6 01 06 ✓
12 05 02 ✓

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chairman

Rodney B. Shelley,

Jacob S. Minchey, Secretary

Olef C. Jensen, Assessor

Melvin H. Heist, Treasurer

BOOK A-369

INDEX DIAGRAM.

Township 18 South, Range 10 East,

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	31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Nathan K. Knight and Rodney B. Shelley, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the retracement of the W. & N. bdys. of T. 18 S., R. 10 E. and the N. bdy. of T. 19 S., R. 9 E., S. L. B. & M. in the state of Utah.

Nathan K. Knight, Chainman.
Rodney B. Shelley, Chainman.

Subscribed and sworn to before me this 17th day of October, 1920



Farvey D. Geist
U.S. Deputy Surveyor

We, I, Jacob E. Minchey, do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given me, to the best of my skill and ability, in the retracement of the N. & W. bdys. of T. 18 S., R. 10 E., and the N. bdy. of T. 19 S., R. 9 E., S. L. B. & M. in the state of Utah

Jacob E. Minchey, Moundman.
Moundman.

Subscribed and sworn to before me this 17th day of October, 1920



Farvey D. Geist
U.S. Deputy Surveyor

We, I, Olef C. Jensen, do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given me, to the best of my skill and ability, in the retracement of the N. & W. bdys. of T. 18 S., R. 10 E., and the N. bdy. of T. 19 S., R. 9 E., S. L. B. & M. in the state of Utah.

Olef C. Jensen, Axman.
Axman.

Subscribed and sworn to before me this 17th day of October, 1920



Farvey D. Geist
U.S. Deputy Surveyor

I, Melvin D. Heist, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the retracement of the W. & N. bdys. of T. 18 S., R. 10 E., and the N. bdy. of T. 19 S., R. 9 E., S. L. B. & M., in the state of Utah.

Melvin D. Heist, Flagman.

Subscribed and sworn to before me this 17th day of October, 1920



Farvey D. Geist
U.S. Deputy Surveyor

CHAINS

Survey commenced October 17, 1910, and executed with a W. & L. E. Gurley explorer's transit, No. - , with solar attachment.

The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, October 15, 1910

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the $\frac{1}{2}$ sec. cor., bet. secs. 31 and 36, on the W. bdy. of T. 18 S., R. 10 E., which is a limestone 8x6x4 ins. above ground, marked and witnessed as described by the surveyor general, in approximate latitude $39^{\circ}13'N.$, longitude $110^{\circ}54'W.$, I set off $39^{\circ}13'N.$ on lat. arc, $9^{\circ}10'S.$ on decl. arc; and at 3h. 46m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

October 17, 1910

October 18: At 5h. 41m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instruction, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

CHAINS

At 7h.45m., a.m., l.m.t., I set off $39^{\circ}13'N.$ on lat. arc, $9^{\circ}25'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0.11" west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m., a.m. is $N.16^{\circ}45'W.$, the angle thus determined gives the mag. decl. $16^{\circ}45'E.$

The cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., being missing I proceed to re-establish the same as follows:

I begin at the $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, on the W. bdy. of T.18 S., R.10 E., already described and run South, on resurvey line, Bet. secs. 31 and 36.

Descend over rocky land.

2.00 Hollow, 50 ft. deep, course SW.

Ascend.

3.50 Rocky spur, projects SW.

Descend over rolling land.

23.00 Hollow, 50 ft. deep, course SW.

Ascend.

32.00 Rocky spur, projects W.

Descend along west slope.

37.00 Enter east side of wide hollow, course from NW. to SE.

Along east edge of hollow.

38.73 To a point 40.43 chs. East of the $\frac{1}{4}$ sec. cor. bet. secs. 1 and 36 on the N. bdy. of T.19 S., R.9 E., which is a granite stone, 8x6x6 ins. above ground, marked and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of Tps. 18 and 19 S.,

RETRACEMENT OF THE WEST BOUNDARY OF T.18 S., R.10 E.

CHAINS

Rs. 9 and 10 E., marked on brass cap
 T 18 S on N. half, T 19 S on S. half,
 R 9 E S 36 in NW.,
 R 10 E S 31 in NE.,
 R 10 E S 6 in SE. and
 R 9 E S 1 in SW. quadrant, and raise a mound of stone,
 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
 Pits impracticable.

Land, rolling.

Soil, rocky and sandy, 3rd. rate.

No timber.

From the $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, on W. bdy. of
 T. 18. S., R. 10 E., already described, I run
 North, retracing bet. secs. 31 and 36.

40.65 Fall 21 lks. E. of the cor. of secs. 25-30-31 and 36, which
 is a limestone, 8x8x6 ins. above ground, marked and witnessed
 as described by the surveyor general.
 The course of this line is therefore N. $0^{\circ}18'W.$, and the
 distance 40.65 chs.

North, retracing bet. secs. 25 and 30.

40.42 Fall 21 lks. E. of the $\frac{1}{4}$ sec. cor., which is a sandstone,
 8x8x4 ins. above ground, marked and witnessed as described
 by the surveyor general.
 I continue on same line.

80.89 Intersect the cor. of secs. 19-24-25 and 30, which
 is a sandstone, 10x14x4 ins. above ground, marked and
 witnessed as described by the surveyor general.
 The course of this line is therefore N. $0^{\circ}18'W.$, on first
 half, N. $0^{\circ}18'E.$ on second half, the
 length of the first half, 40.42 chs., the second half,
 40.47 chs.

North, retracing bet. secs. 19 and 24.

40.65 Fall 32 lks. E. of the $\frac{1}{4}$ sec. cor., which is a sandstone,
 5x8x4 ins. above ground, marked and witnessed as described

CHAINS

by the surveyor general.

The course of this line is therefore N.0°27'W., and the dist. 40.65 chs.

40.17 I offset over the $\frac{1}{4}$ sec. cor. and continue north
Fall 14 lks. E. of the cor. of secs. 13-18-19 and 24, which is a sandstone, 6x5x4 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°12'W., and the distance 40.17 chs.

October 18: At this cor. I set off 9°30'S. on decl. arc, and at 11h. 45m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 39°15'N.

North, retracing bet. secs. 13 and 18.

40.73 Fall 10 lks. E. of the $\frac{1}{4}$ sec. cor., which is a flint stone 6x5x4 ins. above ground, marked and witnessed as described by the surveyor general.

I continue on same line, north

81.15 Fall 20 lks. E. of the cor. of secs. 7-12-13 and 18, which is a sandstone, 6x9x6 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore, N.0°09'W., and the distance 81.15 chs.

North, retracing bet. secs. 7 and 12.

40.40 Fall 16 lks. E. of the $\frac{1}{4}$ sec. cor., which is a shale stone, 10x10x2 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°14'W., and the distance, 40.40 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue north, at 40.00 chs. no trace can be found of the cor. of secs. 1-6-7 and 12, I continue north and can find no trace of line or cor. until at 121.32 chs. fall 11 lks. W. of the cor. of Tps. 17 and 18 S., Rs. 9 and 10 E., which is a sandstone 5x6x5 ins. above ground, marked and witnessed as described

RETRACEMENT OF THE WEST BOUNDARY OF T.18 S.,R.10 E.

CHAINS

by the surveyor general.

The course of this line is therefore N.0°03'E., and the proportionate distance for each half mile is 40.44 chs.

I therefore resurvey the north 1½ miles of the west bdy. as follows:

I begin at the cor.of Tps.17 and 18 S.,Rs.9 and 10 E., and run

S.0°03'W., on resurvey line, bet. secs.1 and 6.

Descend over rolling land, through sparse undergrowth.

40.44

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established ¼ sec. cor., marked on brass cap; ¼ S 1 on W. half, S 6 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

80.22

Set an iron post, 3 ft. long, 3 ins. dia., in mound of earth for re-established cor. of secs. 1-6-7 and 12, marked on brass cap, T 18 S on N. half,
R 9 E S 1 in NW.,
R 10 E S 6 in NE.,
S 7 in SE. and S 12 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Note:

On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

Land, rolling.

Soil, sandy loam, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

S.0°03'W., resurveying bet. secs. 7 and 12.

Over rolling land, through sparse undergrowth.

14.90 Road, Green River to Huntington, bears E. and W.

16.20 Branch of same road, bears E. and W.

40.44 The ¼ sec. cor. bet. secs. 7 and 12, heretofore described.

Land, rolling.

RETRACEMENT OF THE WEST BOUNDARY OF T.18 S.,R.10 E.

CHAINS

Soil, sandy loam, 2nd. rate.
 No timber.
 Undergrowth, sage brush and shad scale.

October 18, 1910

RETRACEMENT OF THE NORTH BOUNDARY OF T.18 S.,R.10 E.

October 19: At 7h.45m., a.m., l.m.t., I set off $39^{\circ}17'N$.
 on lat. arc, $9^{\circ}46'B$. on decl. arc, and determine a meridian
 with the solar at the cor. of Tps. 17 and 18 S., Rs. 9 and
 10 E.

Thence I run

East, on retracement line, bet. secs. 6 and 31.

40.70 Fall 52 lks. S. of the $\frac{1}{4}$ sec. cor. which is a shale stone,
 10x14x2 ins. above ground, marked and witnessed as
 described by the surveyor general.

The course of this line is therefore $N.89^{\circ}15'E.$, and the
 distance 40.70 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue east

39.75 Fall 36 lks. S. of the cor. of secs. 5-6-31 and 32, which is
 a shale stone, 13x16x2 ins. above ground, marked and wit-
 nessed as described by the surveyor general.

The course of this line is therefore $N.89^{\circ}29'E.$, and the
 distance 39.75 chs.

East, on retracement line, bet. secs. 5 and 32.

40.42 Fall 21 lks. S. of the $\frac{1}{4}$ sec. cor. which is a shale stone,
 12x16x3 ins. above ground, marked and witnessed as
 described by the surveyor general.

I continue on same line.

80.82 Fall 42 lks. S. of the cor. of secs. 4-5-32 and 33, which is
 a sandstone, 5x6x3 ins. above ground, marked and witnessed
 as described by the surveyor general.

The course of this line is therefore $N.89^{\circ}42'E.$ and the
 distance 80.82 chs.

CHAINS

East, on retracement line, bet. secs. 4 and 33.

40.24 Fall 20 lks. S. of the $\frac{1}{4}$ sec. cor. which is a sandstone, 4x5x4 ins. above ground, marked and witnessed as described by the surveyor general.

I continue on same line east.

79.58 Fall 40 lks. S. of the cor. of secs. 3-4-33 and 34, which is a sandstone, 12x13x4 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore N.89°43'E., and the dist. 79.58 chs.

S.89°56'E., on retracement line, bet. secs. 3 and 34.

40.20 Fall 28 lks. N. of the $\frac{1}{4}$ sec. cor. which is a sandstone, 18x12x3 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°32'E., and the distance 40.20 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue S.89°56'E.

39.89 Fall 105 lks. N. of the cor. of secs. 2-3-34 and 35, which is a sandstone, 16x8x4 ins., firmly set in a mound of stone, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.88°26'E., and the distance, 39.90 chs.

October 19: At this cor. I set off 9°51'S. on decl. arc, and at 11h.45m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°17'N.

S.89°56'E., on retracement line, bet. secs. 2 and 35.

40.04 Fall 53 lks. S. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 12x12x5 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore N.89°18'E., and the distance, 40.05 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue S.89°56'E.

CHAINS

CHAINS

40.20 Fall 107 lks.N.of the cor.of secs.1-2-35 and 36,which is a sandstone,10x10x6 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore S.88°24'E.,and the distance,40'22 chs.

S.89°56'E.,on retracement line,bet.secs.1 and 36.

39.93 Fall 1 1/2 lks.N.of the 1/4 sec.cor.,which is a limestone,16x10x4 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°55'E.,and the distance 39.93 chs.

I offset over the 1/4 sec.cor.and continue S.89°56'E.

39.89 Fall 88 lks.N.of the cor.of Tps.17 and 18 S.,Rs.10 and 11 E.,which is a limestone,14x10x10 ins.,firmly set in a mound of stone,marked and witnessed as described by the surveyor general.

The course of this line is therefore S.88°40'E.,and the distance 39.91 chs.

October 19, 1910

For table of latitudes and departures,see resurvey of the South and East bdys.of T.18 S.,R.10 E.

For General Description see Subdivisions of T.18 S., R.10 E.

Harry A. Geist
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of

showing the respective capacities in which they acted:

For list of names and final oath of assistants see book "D", *Chainman.*

T. 12 S., R. 9 E., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

....., United States Deputy Surveyor, in surveying all

those parts or portions of the

..... of the

..... meridian, of, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

Subscribed and sworn to before me this }
day of, 19



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 19____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of deputy see book "D" T. 19 S. R. 9 N.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1914

The foregoing field notes of the ~~XXXXXX~~ retracement of the west and north boundaries of Township No. 18 South, Range No. 10 East of the Salt Lake Base and Meridian, Utah,

examined by _____ Harvey D. Geist and Walter A. Stumm under contract No. 320 dated _____ May 3, _____ 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the _____ they describe, are hereby approved.

Thomas Hill
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____ has been correctly copied from the original notes on file in this office.

United States Surveyor General

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Page

BOOK A-369

" B "

FILED
DEC 31 1910
M. S. B.

FIELD NOTES

RE
OF THE SURVEY OF THE

S. O. U. T. H. and E. A. S. T. B. O. U. N. D. A. R. I. E. S.

of

TOWNSHIP NO. 18 SOUTH, RANGE NO. 10 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors
their

Under his Contract No. 320, dated May 3, 1910

Survey commenced October 20, 1910

Survey completed October 23, 1910

South	6 00 80
East	6 03 05
	<hr/>
	12 03 85
	12 05 02
	<hr/>
	24 08 87

NAMES AND DUTIES OF ASSISTANTS.

Nathan Knight, Chairman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

BOOK A-369

AGASSIS v. 11

INDEX DIAGRAM.

Township 18 South, Range 10 East,

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30	29	28	27	26	25	10
31	32	33	34	35	36	9
2	3	5	6	6	7	

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Nathan K. Knight, and Rodney B. Shelley do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of S. & E. bdys. of T. 18 S., R. 10 E., S. 1. B. & M., in the state of Utah.

Nathan K. Knight, Chairman.
Rodney B. Shelley, Chairman.

Subscribed and sworn to before me this 20th. day of October, 1910



Fanny D. Geist, U.S. Deputy Surveyor

WE, I, Jacob E. Minchey, do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of my skill and ability, in the survey of the S. & E. bdys. of T. 18 S., R. 10 E., S. 1. B. & M., in the state of Utah.

Jacob E. Minchey, Moundman.

Subscribed and sworn to before me this 20th. day of October, 1910



Fanny D. Geist, U.S. Deputy Surveyor

WE, I, Olef C. Jensen, do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us, to the best of my skill and ability, in the survey of the S. & E. bdys. of T. 18 S., R. 10 E., S. 1. B. & M., in the state of Utah.

Olef C. Jensen, Axman.

Subscribed and sworn to before me this 20th. day of October, 1910



Fanny D. Geist, U.S. Deputy Surveyor

I, Melvin D. Heist, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the S. & E. bdys. of T. 18 S., R. 10 E., S. 1. B. & M., in the state of Utah.

Melvin D. Heist, Flagman.

Subscribed and sworn to before me this 20th. day of October, 1910



Fanny D. Geist, U.S. Deputy Surveyor

RESURVEY OF THE SOUTH BOUNDARY OF T.18 S.,R.10 E.

CHAINS

Survey commenced, October 20, 1910, and executed with the instrument described in book "A", of this survey.

I know the instrument to be in adjustment from recent observations made October 17 and 18, 1910 at the $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, on the W. bdy. of T.18 S., R.10 E. and recorded in book "A", of this survey.

I begin at the cor. of Tps., 17 and 18 S., Rs. 10 and 11 E. heretofore described.

At 7h. 45m., a.m., l.m.t., I set off $39^{\circ}17'N.$ on lat. arc, $10^{\circ}08'S.$ on decl. arc, and determine a meridian with the solar.

Thence I run
South on retracement line, bet. secs. 1 and 6.

40.00 No trace can be found of the $\frac{1}{4}$ sec. cor.

80.00 No trace can be found of the cor. of secs. 1-6-7 and 12.

I continue my line south and can find no trace of any cor. and at 480.00 chs. set a temporary cor. for cor. of Tps. 18 and 19 S., Rs. 10 and 11 E.

October 20, 1910

October 21: At 7h. 45m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $10^{\circ}30'S.$ on decl. arc, and determine a meridian with the solar at the temp. cor. for Tps. 18 and 19 S., Rs. 10 and 11 E.

Thence I run
 $S.89^{\circ}58'W.$, on retracement line along the south bdy. of T.18 S., R.10 E., and can find no traces of any cor. until at 480.80 chs. fall 2.74 chs. north of the re-established cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., heretofore described.

October 21, 1910

There being no cors. found on the S. and E. bdys. of this Tp., and as the south bdy. will deviate from an E. and W. line over $21'$ of arc, I resurvey these bdys. on due E. and due north courses, respectively, placing the fractional

CHAINS

distances against the old work.

I proceed as follows:

October 22: At 7h.45m., a.m., l.m.t., I set off $39^{\circ}12'N$.

on lat.arc, $10^{\circ}51'S$ on decl.arc, and determine a meridian with the solar at the re-established cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., heretofore described.

Thence I run

East, on a resurvey line,

Bet. secs. 6 and 31.

Abrupt ascent over mountainous land, through sparse undergrowth over broken sandstone ledges.

2.00 Top of abrupt ascent, bears N. and S.

Gradual ascent.

2.90 Enter scattering timber.

5.50 Spur, projects SW.

Abrupt descent.

11.75 Hollow, 75 ft. deep, course SW.

Ascend over rolling land.

36.00 Leave timber.

40.80 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 31 on N. half, S 6 on S. half, from which

A cedar, 12 ins. diam., bears $N.16^{\circ}E.$, 288 lks. dist., marked $\frac{1}{4}$ S 31 BT.

A cedar, 5 ins. diam., bears $S.84^{\circ}E.$, 380 lks. dist., marked $\frac{1}{4}$ S 6 BT.

After diligent search no trace can be found of the old $\frac{1}{4}$ sec. cor. ✓

43.75 Enter scattering timber.

63.55 Rocky wash, 1.00 ch. wide, 20 ft. deep, course NW.

75.20 Rocky wash, 1.00 ch. wide, 20 ft. deep, course SW.

80.80 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 5-6-31 and 32, marked on brass cap, T 18 S S 31 in NW.,

R 10 E S 32 in NE.,

CHAINS

R 10 E S 5 in SE. and
 T 19 S S 6 in SW. quadrant, from which
 A cedar, 11 ins. diam., bears N. 33° E., 141 lks. dist.,
 marked T 18 S R 10 E S 32 BT.
 A cedar, 5 ins. diam., bears S. 51° E., 129 lks. dist.,
 marked T 19 S R 10 E S 5 BT.
 A pinon, 12 ins. diam., bears S. 88° 30' W., 130 lks.
 dist., marked T 19 S R 10 E S 6 BT.
 A cedar, 6 ins. diam., bears N. 32° W., 29 lks. dist.,
 marked T 18 S R 10 E S 31 BT.

After diligent search no trace can be found of the old
 sec. cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

Undergrowth, sage brush and bunch grass.

Mountainous land on 11.75 chs.

East, resurveying bet. secs. 5 and 32.

Ascend over rocky and rolling land, through scattering
 timber.

9.50 Ridge, bears NW. and SE.

Descend.

11.00 Hollow, 50 ft. deep, course NW.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S 32 on N. half, S 5 on S. half, from which

A cedar, 8 ins. diam., bears S. 57° W., 45 lks. dist.,
 marked $\frac{1}{4}$ S 5 BT.

A pinon, 8 ins. diam., bears N. 36° W., 77 lks. dist.,
 marked $\frac{1}{4}$ S 32 BT.

After diligent search no trace can be found of the old
 $\frac{1}{4}$ sec. cor. ✓

42.00 Ridge, bears NW. and SE.

Descend.

RESURVEY OF THE SOUTH BOUNDARY OF T.18 S., R.10 E.

CHAINS

- 47.00 Hollow, 50 ft. deep, course NW.
Ascend.
 - 60.00 Rocky spur, projects NW.
Descend.
 - 62.50 Hollow, 50 ft. deep, course NW.
Ascend.
 - 66.00 Spur, projects NW.
Descend.
 - 68.00 Hollow, 50 ft. deep, course NW.
Ascend.
 - 70.70 Ridge, bears NW. and SE.
Descend abruptly over boulders.
 - 80.00 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone and earth, for re-established cor. of secs. 4-5-32 and 33, marked on brass cap, T 18 S S 32 in NW.,
R 10 E S 33 in NE.,
R 10 E S 4 in SE. and
T 19 S S 5 in SW. quadrant, from which
 - A pinon, 5 ins. diam., bears N. 1° E., 63 lks. dist., marked T 18 S R 10 E S 33 BT.
 - A cedar, 12 ins. diam., bears S. 69° E., 29 lks. dist., marked T 19 S R 10 E S 4 BT.
 - A pinon, 5 ins. diam., bears S. 18° 15' W., 59 lks. dist., marked T 19 S R 10 E S 5 BT.
 - A pinon, 5 ins. diam., bears N. 50° 30' W., 56 lks. dist., marked T 18 S R 10 E S 32 BT.
- After diligent search no trace can be found of the old sec. cor.
- Land, rolling and mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 9.30 chs.

CHAINS

East, resurveying bet. secs. 4 and 33.

Descend abruptly over conglomerate boulders, through scattering timber.

25.00 Foot of abrupt descent, 200 ft. below sec. cor., bears NW. and SE.

Leave rocky land and timber.

Over level land through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 33 on N. half, S 4 on S. half, dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.After diligent search no trace can be found of the old $\frac{1}{2}$ sec. cor. ✓

48.80 Wash, 15 lks. wide, 8 ft. deep, course SE:

74.20 Road, bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 3-4-33 and 34, marked on brass cap, T 18 S S 33 in NW., R 10 E S 34 in NE., R 10 E S 3 in SE. and T 19 S S 4 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.No trace can be found of the sec. cor. ✓
Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 25.00 chs.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, sage brush and punch grass.

Mountainous land on 25.00 chs.

October 22: At this cor. I set off $10^{\circ}56'S$ on decl. arc, and at 11h. 45m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}12'N$.

RESURVEY OF THE SOUTH BOUNDARY OF T.18 S.,R.10 E.

CHAINS

East, resurveying bet. secs. 3 and 34.

Over level land, through sparse undergrowth.

10.60 Road from Gree River to Huntington, bears NW. and SE.

56.00 Wash, 40 lks. wide, 10 ft. deep, course SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on N. half, S 3 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

57.50 No trace can be found of the old $\frac{1}{4}$ sec. cor. ✓
Wash, 50 lks. wide, 6 ft. deep; course SE.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 2-3-34 and 35, marked on brass cap, T 18 S S 34 in NW.,

R 10 E S 35 in NE.,

R 10 E S 2 in SE. and

T 19 S S 3 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base,

2 ft. high, W. of cor.

After diligent search no trace can be found of the old sec. cor. ✓

Land, level.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage brush and bunch grass.

East, resurveying bet. secs. 2 and 35.

Over level land, through sparse undergrowth.

24.00 Wash, 30 lks. wide, 6 ft. deep, course SE.

38.00 Wash, 20 lks. wide, 5 ft. deep, course SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on N. half, S 2 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

After diligent search no trace can be found of the old $\frac{1}{4}$ sec. cor. ✓

RESURVEY OF THE SOUTH BOUNDARY OF T.18 S., R.10 E.

CHAINS

- 54.00 Leave level land, bears NW. and SE.
- Begin abrupt ascent over sandstone ledges.
- 58.00 Top of abrupt ascent, 150 ft. above the level land,
bears NW. and SE.
- Over level, solid sandstone, through scattering timber.
- 68.00 Begin abrupt descent, bears NE. and SW.
- Leave timber.
- 72.00 Hollow, 150 ft. deep, course SW.
- Ascend abruptly over solid sandstone.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone
and earth for re-established cor. of secs. 1-2-35 and 36,
marked on brass cap, T 18 S S 35 in NW.,
R 10 E S 36 in NE.,
R 10 E S 1 in SE. and
T 19 S S 2 in SW. quadrant, and raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. ✓
- Pits impracticable.
- On account of natural obstacles, it is impossible to set
this post in the ground. ✓
- After diligent search, no trace can be found of the old
sec. cor. ✓
- Land, level and mountainous.
- Soil, loam, 1st. rate on 54.00 chs.
balance, solid sandstone, 4th. rate.
- Timber, cedar and pinon.
- Undergrowth, sage brush and bunch grass.
- Mountainous land on 26.00 chs.
- East, resurveying bet. secs. 1 and 36.
- Ascend abruptly over solid sandstone.
- 16.50 Top of solid sandstone ledges, bearing NE. and SW.
- Ascend over conglomerate boulders, through scattering
timber.

CHAINS

- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 36 on N. half, S 1 on S. half, from which
- A pinon, 6 ins. diam., bears S. 17° E., 73 lks. dist., marked $\frac{1}{2}$ S 1 BT.
- A pinon, 15 ins. diam., bears N. 11° W., 63 lks. dist., marked $\frac{1}{2}$ S 36 BT.
- After diligent search no trace can be found of the old $\frac{1}{4}$ sec. cor. ✓
- 61.00 Begin abrupt ascent along steep south slope, over huge conglomerate boulders.
- 80.00 At a point 3.05 chs. S. of the temp. Tp. cor.
- Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone and earth. for cor. of Tps. 18 and 19 S., Rs. 10 and 11 E., marked on brass cap, T 18 S on N. half,
- T 19 S on S. half,
- R 10 E S 36 in NW.,
- R 11 E S 31 in NE.,
- R 11 E S 6 in SE. and
- R 10 E S 1 in SW. quadrant, from which
- A pinon, 14 ins. diam., bears N. 72° E., 99 lks. dist., marked T 18 S R 11 E S 31 BT.
- A pinon, 15 ins. diam., bears S. 70° E., 57 lks. dist., marked T 19 S R 11 E S 6 BT.
- A pinon, 18 ins. diam., bears N. 38° W., 56 lks. dist., marked T 18 S R 10 E S 36 BT.
- No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
- Pits impracticable. ✓
- Note:
- On account of natural obstacles it is impossible to set this post over 12 ins. in the ground. ✓
- After diligent search no trace can be found of the old Tp. cor.
- Land, mountainous.
- Soil, rocky, 3rd. and 4th. rate.

RESURVEY OF THE SOUTH BOUNDARY OF T.18 S., R.10 E.

CHAINS

Timber, cedar and pinon.
 Mountainous land on 80.00 chs.
 October 22, 1910

RESURVEY OF THE EAST BOUNDARY OF T.18 S., R.10 E.

October 23: At 7h.45m., a.m., 1.m.t., I set off 39°12'N.
 on lat.arc, 11°12'S. on decl.arc, and determine a meridian
 with the solar at the re-established cor. of Tps. 18 and
 19 S., Rs. 10 and 11 E.
 Thence I run
 North, resurveying bet. secs. 31 and 36.

Ascend abruptly over rocky and mountainous land,
 through scattering timber.

0.50 Top of south rim of Cedar Mountain, 1152 ft. above the
 cor. of secs. 2-3-34 and 35, on the S. bdy. of the Tp.,
 bears NW. and SE.

Enter heavy timber, bears NW. and SE.
 Gradual ascent.

6.00 Begin gradual descent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass
 cap, $\frac{1}{4}$ S 36 on W. half, S 31 on E. half, from which
 A pinon, 12 ins. diam., bears S. 42° E., 55 lks. dist.,
 marked $\frac{1}{4}$ S 31 BT.
 A pinon, 10 ins. diam., bears S. 84° W., 42 lks. dist.,
 marked $\frac{1}{4}$ S 36 BT.

After diligent search, no trace can be found of the old
 $\frac{1}{4}$ sec. cor.

48.00 Leave timber, bears NW. and SE.

58.00 Enter heavy timber, bears E. and W.

71.00 Leave timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
 ground, for re-established cor. of secs. 25-30-31 and 36,
 marked on brass cap, T 18 S on N. half,

CHAINS

R 10 E S 25 in NW.,

R 11 E S 30 in NE.,

S 31 in SE. and S 36 in SW. quadrant, from which

A cedar, 15 ins. diam., bears N. 9° 30' E., 255 lks. dist., marked T 18 S R 11 E S 30 BT.

A cedar, 6 ins. diam., bears S. 84° W., 227 lks. dist., marked T 18 S R 10 E S 36 BT.

A pinon, 9 ins. diam., bears N. 11° W., 198 lks. dist., marked T 18 S R 10 E S 25 BT.

No other trees within limits; dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

After diligent search no trace can be found of the old sec. cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or land heavily timbered on 80.00 chs.

North, resurveying bet. secs. 25 and 30.

Gradual descent.

15.00 Enter heavy timber, bears NW. and SE.

26.00 Wash, 50 lks. wide, 10 ft. deep, course NE.

34.00 Begin descent over solid sandstone, bears NW. and SE.

40.00 In head of hollow, course NE.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established ¼ sec. cor., marked on brass cap, ¼ S 25 on W. half, S 30 on E. half, from which

A pinon, 4 ins. diam., bears N. 14° W., 24 lks. dist., marked ¼ S 25 BT.

A cedar, 14 ins. diam., bears N. 52° E., 21 lks. dist., marked ¼ S 30 BT.

After diligent search no trace can be found of the old ¼ sec. cor.

Ascend over solid sandstone ledges.

44.00 Top of ledges, bearing NE. and SW.

CHAINS

Leave ledges, begin gradual descent.

66.95 Begin abrupt descent over conglomerate ledges, and huge boulders, abrupt descent, bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for re-established cor. of secs. 19-24-25 and 30, marked on brass cap, T 18 S on N. half,

R 10 E S 24 in NW.,

R 11 E S 19 in NE.,

S 30 in SE. and S 25 in SW. quadrant, from which

A pinon, 6 ins. diam., bears N. 22° E., 9 lks. dist., marked T 18 S R 11 E S 19 BT.

A pinon, 5 ins. diam., bears S. 88° E., 22½ lks. dist., marked T 18 S R 11 E S 30 BT.

A pinon, 6 ins. diam., bears S. 36° W., 19½ lks. dist., marked T 18 S R 10 E S 25 BT.

A pinon, 14 ins. diam., bears N. 11° W., 67 lks. dist., marked T 18 S R 10 E S 24 BT.

No trace can be found of the witness cors. which were set at points 7.00 chs. S. and 4.30 chs. W. of this old cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or land covered with heavy timber, on

65.00 chs.

North, resurveying bet. secs. 19 and 24.

Ascend along steep, east slope, over huge conglomerate ledges, through scattering timber.

28.00 Spur, projects E.

Descend along steep east slope.

34.00 Hollow, 100 ft. deep, course E.

Ascend along steep, east slope.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on W. half, S 19 on E. half, from which

A pinon, 6 ins. diam., bears N. 73° W., 30 lks. dist.,

CHAINS

marked $\frac{1}{4}$ S 24 BT. ...
 A pinon, 4 ins. diam., bears S. 47° E., 34 lks. dist.
 marked $\frac{1}{4}$ S 19 BT. ...
 No trace can be found of the witness $\frac{1}{4}$ sec. cor. which was
 set 13.80 chs. west of true point for the cor. ✓
 41.25 Spur, projects E.
 Descend.
 47.00 Hollow, 75 ft. deep, course NE.
 Ascend.
 58.00 Spur, projects NE.
 Abrupt descent over boulders.
 78.00 Hollow, 100 ft. deep, course NE.
 Abrupt ascent.
 79.60 Spur, projects NE.
 Abrupt descent.
 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
 ground, for re-established cor. of secs. 13-18-19 and 24,
 marked on brass cap, T 18 S on N. half,
 R 10 E S 13 in NW.,
 R 11 E S 18 in NE.,
 S 19 in SE. and S. 24. in SW. quadrant, from which
 A pinon, 5 ins. diam., bears N. 13° E., 25 lks. dist.,
 marked T 18 S R 11 E S 18 BT.
 A pinon, 6 ins. diam., bears S. 33° E., 34 lks. dist.,
 marked T 18 S R 11 E S 19 BT.
 A cedar, 8 ins. diam., bears S. 85° W., 19 lks. dist.,
 marked T 18 S R 10 E S 24 BT.
 A cedar, 7 ins. diam., bears N. 87° W., 19 lks. dist.,
 marked T 18 S R 10 E S 13 BT.
 No trace can be found of the old witness cor., which
 was set 13.80 chs. W. of this cor. ✓
 Land, mountainous.
 Soil, rocky covered with large boulders, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Mountainous land on 80.00 chs.
 October 23: At this cor. I set off 11° 17' S. on decl. arc,

CHAINS

and at 11h.45m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}15'N$.

North, resurveying bet. secs. 13 and 18.

Descend abruptly over rocky and mountainous land, through scattering timber.

10.50 Leave rocky land and timber, bears NW. and SE.

Enter bottom of Bull Hollow, 300 ft. deep, course NW. Over level sandy land, through sparse undergrowth.

14.00 Wash, 50 lks. wide, 15 ft. deep, course NW.

19.00 Leave Bull Hollow.

Ascend abruptly over rocky land, through scattering timber.

32.00 Spur, projects SW.

Descend.

37.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 13 on W. half, S 18 on E. half, from which

A cedar, 10 ins. diam., bears $N.67^{\circ}W.$, 30 lks' dist., marked $\frac{1}{4}$ S 13 BT.

A cedar, 5 ins. diam., bears $S.50^{\circ}E.$, $49\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 18 BT.

54.00 No trace can be found of the old witness cor. to $\frac{1}{4}$ sec. cor. Top of abrupt ascent, bears NW. and SE.

Enter heavy timber, bears NW. and SE.

Over level land.

72.25 Wood road, bears NW. and SE.

79.50 Leave timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 7-12-13 and 18, marked on brass cap, T 18 S on N. half,

R 10 E S 12 in NW.,

R 11 E S 7 in NE.,

S 18 in SE. and S 13 in SW. quadrant, from which

CHAINS

A cedar, 12 ins. diam., bears N. 76° 45' E., 227 lks. dist., marked T 18 S R 11 E S 7 BT.

A pinon, 10 ins. diam., bears S. 29° 15' E., 51 lks. dist., marked T 18 S R 11 E S 18 BT.

A pinon, 24 ins. diam., bears S. 34° W., 79 lks. dist., marked T 18 S R 10 E S 13 BT.

A pinon, 8 ins. diam., bears N. 69° 30' W., 110 lks. dist., marked T 18 S R 10 E S 12 BT.

After diligent search, no trace can be found of the old sec. cor. ✓

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 45.50 chs.

balance, sandy, 2nd. rate.

Timber, cedar and pinon.

Undergrowth, greasewood.

Mountainous land, or heavily timbered on 71.00 chs.

North, resurveying bet. secs. 7 and 12.

Over level land, through sparse undergrowth.

8.00 Enter heavy timber, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 12 on W. half, S 7 on E. half, from which

A pinon, 10 ins. diam., bears S. 17° W., 82 lks. dist., marked $\frac{1}{4}$ S 12 BT.

A cedar, 6 ins. diam., bears S. 63° E., 24 lks. dist., marked $\frac{1}{4}$ S 7 BT.

After diligent search no trace can be found of the old $\frac{1}{4}$ sec. cor. ✓

40.80 Wood road, bears NW. and SE.

51.00 Begin abrupt descent over rocky land, bears NW. and SE.

Leave heavy timber, bears NW. and SE.

Enter scattering timber.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 1-6-7 and 12, marked on brass cap, T 18 S on N. half,

CHAINS

R 10 E S 1 in NW.,

R 11 E S 6 in NE.,

S 7 in SE. and S 12 in SW. quadrant, from which

A cedar, 9 ins. diam., bears N. 27° E., 70 lks. dist.,
marked T 18 S R 11 E S 6 BT.

A pinon, 10 ins. diam., bears S. 56° E., 16 lks. dist.,
marked T 18 S R 11 E S 7 BT.

A pinon, 5 ins. diam., bears S. 89° W., 64 lks. dist.,
marked T 18 S R 10 E S 12 BT.

A pinon, 8 ins. diam., bears N. 2° W., 39 lks. dist.,
marked T 18 S R 10 E S 1 BT.

After diligent search no trace can be found of the old
sec. cor.

Land, level and mountainous.

Soil, sandy, on 51 .00 chs., 2nd. rate.

balance, rocky, 3rd. rate.

Timber, cedar and pinon.

Undergrowth, sage brush.

Mountainous land or land covered with heavy timber on:

72.00 chs.

North, resurveying bet. secs. 1 and 6.

Descend abruptly over rocky and mountainous land, through
scattering timber.

3.00 Foot of abrupt descent, bears NW. and SE.

Leave rocky land and timber.

Over level land in basin, draining E.

27.00 Leave basin, begin abrupt ascent over rocky land, bearing
NE. and SW.

34.00 Rocky spur, projects E.

Descend.

39.75 Hollow, 100 ft. deep, course E.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass
cap, $\frac{1}{4}$ S 1 on W. half, and S 6 on E. half, and raise a mound
of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. ✓

CHAINS

Pits impracticable.

After diligent search, no trace can be found of the old
 $\frac{1}{4}$ sec. cor.

43.00 Rocky spur, projects SW.

Descend.

45.00 Same hollow, 75 ft. deep, course SW.

Ascend.

46.15 Rocky spur, projects E.

Descend.

47.00 Same hollow, 75 ft. deep, course SE.

Ascend.

53.00 Spur, projects SW.

Descend.

55.25 Same hollow, 50 ft. deep, course SW.

Abrupt ascent.

65.00 Enter scattering timber.

67.00 Ridge, bears NW. and SE.

Abrupt descent.

78.50 Leave timber.

82.75 Hollow, 100 ft. deep, course NE.

Ascend.

83.05 The cor. of Tps. 17 and 18 S., Rs. 10 and 11 E.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 59.05 chs.

balance, sandy, 2nd. rate.

Timber, cedar and pinon.

Mountainous land on 59.05 chs.

October 23, 1910

Latitudes, departures and closing errors

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
T. Bdy.	North ✓	38.73 ✓	38.73 ✓			
	N. 0°18' W. ✓	40.65 ✓	40.65 ✓			0.21 ✓
	N. 0°18' W. ✓	40.42 ✓	40.42 ✓			0.21 ✓
	N. 0°18' E. ✓	40.47 ✓	40.47 ✓		0.21 ✓	
	N. 0°27' W. ✓	40.65 ✓	40.65 ✓			0.32 ✓
	N. 0°12' W. ✓	40.17 ✓	40.17 ✓			0.14 ✓
	N. 0°09' W. ✓	81.15 ✓	81.15 ✓			0.21 ✓
	N. 0°14' W. ✓	40.40 ✓	40.40 ✓			0.16 ✓
T. Bdy.	N. 0°03' E. ✓	121.32 ✓	121.32 ✓		0.11 ✓	
	N. 89°15' E. ✓	40.70 ✓	0.53 ✓		40.70 ✓	
	N. 89°29' E. ✓	39.75 ✓	0.36 ✓		39.75 ✓	
	N. 89°42' E. ✓	80.82 ✓	0.42 ✓		80.82 ✓	
	N. 89°43' E. ✓	79.58 ✓	0.40 ✓		79.58 ✓	
	S. 89°32' E. ✓	40.20 ✓		0.33 ✓	40.20 ✓	
	S. 88°26' E. ✓	39.90 ✓		1.09 ✓	39.89 ✓	
	N. 89°18' E. ✓	40.05 ✓	0.49 ✓		40.04 ✓	
	S. 88°24' E. ✓	40.22 ✓		1.12 ✓	40.20 ✓	
	S. 89°55' E. ✓	39.93 ✓		0.06 ✓	39.93 ✓	
	S. 88°40' E. ✓	39.91 ✓		0.93 ✓	39.89 ✓	
T. Bdy.	South ✓	483.05 ✓		483.05 ✓		
S. Bdy.	West ✓	480.80 ✓				480.80 ✓
Convergency					0.59 ✓	
Totals			486.16 ✓	486.58 ✓	481.91 ✓	482.05 ✓
				486.16		481.91
Error in lat. and dep.				0.42 ✓		0.14 ✓

For General Description, see Subdivisions of

T.18 S., R.10 E.

Harvey D. Geist
 U.S. Deputy Surveyor

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the

S. & E. hdys. of T. 18 S., R. 10 E., S. L. B. & M., in the state of Utah.

showing the respective capacities in which they acted:

Nathan K. Knight, Chairman.

Rodney B. Shelley, Chairman.

Jacob E. Minchey, Moundman.

Olef C. Jensen, Arman.

Melvin D. Heist, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in surveying all those parts or portions of the S. & E. hdys. of T. 18 S., R. 10 E.

of the Salt Lake

Base and re meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Nathan K. Knight Chairman.

Rodney B. Shelley Chairman.

Jacob E. Minchey Moundman.

Olef C. Jensen Moundman.

Olef C. Jensen Arman.

Melvin D. Heist Arman.

23rd.

Subscribed and sworn to before me this _____ day of October, 1900



Harvey D. Heist

U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hill, United States Surveyor General for Utah, bearing date of the 3rd day of May, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the S. & E. bdys. of T. 18 S., R. 10 E.

of the Salt Lake Base and _____ meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist and sworn to before me
this 11th day of January, 1911, ~~190~~¹⁹¹¹

Thomas Hill

U. S. Surveyor-General
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1910.

The foregoing field notes of the ^{re}survey of the South and East Boundaries of Township No. 18 South, Range No. 10 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Walter A. Stumm ^{their} under his contract No. 320, dated May 3, 1910, ~~190~~¹⁹¹⁰, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the resurveys they describe, are hereby approved.

Thomas Hill
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-369

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W.P.B.

FIELD NOTES

M.S.B.

OF THE SURVEY OF THE

SUBDIVISIONS

of

TOWNSHIP NO. 18 SOUTH, RANGE NO. 10 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors

their

Under his Contract No. 320, dated May 3, 1910

Survey commenced October 24, 1910

Survey completed November 3, 1910

60 30 50'

Calvin
7-30 ✓

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chairman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

BOOK A-369

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

We, Nathan K. Knight and Rodney B. Shelley,
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Subdivisions of T.18 S., R.10 E., and Tps.19 S., Rs.9,10 and 11 E., of the S.L.B. & M., in the state of Utah.

Nathan K. Knight, Chainman
Rodney B. Shelley, Chainman

Subscribed and sworn to before me this 24th.
day of October, 1900



Lawey D. Geist
U.S. Deputy Surveyor

We, I, Jacob E. Minchey, ~~and~~
do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ ^{me} to the best of ~~our~~ ^{my} skill and ability, in the survey of the Subdivisions of T.18 S., R.10 E., and Tps.19 S., Rs.9,10 and 11 E., of the S.L.B. & M., in the state of Utah

Jacob E. Minchey, Moundman
Jacob E. Minchey, Moundman

Subscribed and sworn to before me this 24th.
day of October, 1900



Lawey D. Geist
U.S. Deputy Surveyor

We, I, Olef C. Jensen, ~~and~~
do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ ^{me} to the best of ~~our~~ ^{my} skill and ability, in the survey of the Subdivisions of T.18 S., R.10 E., and Tps.19 S., Rs.9,10 and 11 E., of the S.L.B. & M., in the state of Utah.

Olef C. Jensen, Axman
Olef C. Jensen, Axman

Subscribed and sworn to before me this 24th.
day of October, 1900



Lawey D. Geist
U.S. Deputy Surveyor

I, Melvin D. Heist, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of The Subdivisions of T.18 S., R.10 E., and Tps.19 S., Rs.9,10 & 11 E. of the S.L.B. & M., in the state of Utah.

Melvin D. Heist, Flagman

Subscribed and sworn to before me this 24th.
day of October, 1900



Lawey D. Geist
U.S. Deputy Surveyor

CHAINS

Survey commenced October 24, 1910, and executed with the instrument described in book "A" of this survey.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the re-established cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude $39^{\circ}12'N.$, longitude $110^{\circ}48'W.$, I set off $39^{\circ}12'N.$ on lat. arc, $11^{\circ}40'S.$ on decl. arc, and at 3h. 44m. p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

October 24, 1910

October 25: At 5h. 13m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $11^{\circ}54'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about $0'11''$ west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

CHAINS

The magnetic bearing of the true meridian at 8h.30m., a.m. is N.16°45'W., the angle thus determined, gives the mag. decl. 16°45' E.

From the sec. cor., already described, I run

N.0°01'W., bet. secs. 35 and 36.

Descend along steep west slope over solid sandstone.

4.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent over solid sandstone.

9.00 Top of sandstone ledges, bearing NE. and SW.

Begin abrupt ascent along steep, west slope, over conglomerate boulders, through scattering timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on W. half, S 36 on E. half, from which

A cedar, 5 ins. diam., bears N.66°W., 54 lks. dist., marked $\frac{1}{4}$ S 35 BT.

No other trees within limits and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable. ✓

46.35 Top of abrupt ascent, 700 ft. above sec. cor., bears NW. and SE.

Enter heavy timber, bears NW. and SE.

Over level land.

57.00 Leave level land, begin abrupt descent over boulders.

Leave heavy timber, bears NW. and SE.

Enter scattering timber.

72.00 Leave timber and boulders, bearing NW. and SE.

Descend through sparse undergrowth.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked on brass cap, T 18 S S 26 in NW.,

R 10 E S 25 in NE.,

S 36 in SE. and S 35 in SW. quadrant, from which

A cedar, 15 ins. diam., bears N.43°W., 133 lks. dist., marked T 18 S R 10 E S 26 BT.

No other trees within limits and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

CHAINS

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 69.35 chs.

East, on a random line, bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.16 Intersect E. bdy. of Tp., 7 lks. S. of the re-established cor. of secs. 25-30-31 and 36, heretofore described.

Thence I run

S. $89^{\circ}57'W.$, on a true line,

Bet. secs. 25 and 36.

Gradual ascent.

2.30 Enter heavy timber, bears N. and S.

18.00 Wash, 1.00 ch. wide, 20 ft. deep, course NW.

40.08 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 25 on N. half, S 36 on S. half, from which

A pinon, 18 ins. diam., bears N. $11^{\circ}W.$, 82 lks. dist., marked $\frac{1}{4}$ S 25 BT.

A pinon, 12 ins. diam., bears S. $49^{\circ}W.$, 92 lks. dist., marked $\frac{1}{4}$ S 36 BT.

55.70 Begin abrupt descent over broken conglomerate ledges, bearing NW. and SE.

Leave heavy timber, bears NW. and SE.

Enter scattering timber.

71.00 Hollow, 200 ft. deep, course NW.

Leave ledges and timber.

Ascend.

80.16 The cor. of secs. 25-26-35 and 36.

Land rolling and mountainous.

Soil, sandy, 2nd. rate on 55.70 chs.

balance, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land, or heavily timbered on 77.86 chs.

CHAINS	
	N.0°01'W.,bet.secs.25 and 26.
	Descend over mountainous land.
6.00	Enter scattering timber,bears NE.and SW.
23.00	Hollow,200 ft.deep,course NW.
	Leave timber.
	Ascend along steep rocky west slope.
40.00	Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 26 on W. half,S 25 on E.half,and raise a mound of stone,2 ft. base, $1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.✓
51.00	Rocky spur,projects NW.
	Enter scattering timber.
	Abrupt descent.
67.00	Hollow,150 ft.deep,course NW.
	Leave timber.
	Ascend along steep,west slope.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.23-24-25 and 26,marked on brass cap,T 18 S S 23 in NW.,
	R 10 E S 24 in NE.,
	S 25 in SE.and S 26 in SW.quadrant,and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.✓
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	Timber,cedar and pinon.✓
	Mountainous land on 80.00 chs.
	October 25: At this cor.I set off $11^{\circ}59'S$.on decl.arc, and at 11h.44m.,a.m.,1.mt. observe the sun on the meridian,the resulting lat.is $39^{\circ} 14'N$.
	N.89°57'E.,on a random line,bet.secs.24 and 25.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.12	Intersect,E.bdy.of Tp.,3 lks.N.of the re-established cor. of secs.19-24-25 and 30,heretofore described.
	Thence I run

CHAINS

S.89°58'W., on a true line,

Bet. secs. 24 and 25.

Ascend abruptly over conglomerate boulders, through heavy timber.

6.00 Top of abrupt ascent, bears N. and S.

Over level land.

37.00 Leave level land and timber, bears N. and S.

Begin abrupt descent over broken ledges.

40.06 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on N. half, S 25 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

80.12 The cor. of secs. 23-24-25 and 26.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or heavily timbered on 80.12 chs.

N.0°01'W., bet. secs. 23 and 24.

Ascend over rocky and mountainous land, along steep west, slope.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on W. half, S 24 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

47.50 Rocky spur, projects W.

Abrupt descent.

Enter scattering timber.

65.00 Hollow, 250 ft. deep, course NE.

Leave timber.

Abrupt ascent.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked on brass cap, T 18 S S 14 in NW.,

CHAINS

R. 10 E S 13 in NE.,
 S 24 in SE. and S 23 in SW. quadrant, and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 Land, mountainous.
 Soil, rocky, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Mountainous land on 80.00 chs.

N. $89^{\circ}58'E.$, on a random line, bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ seccor.

80.10 Intersect E. bdy. of Tp., 5 lks. S. of the re-established cor.
 of secs. 13-18-19 and 24, heretofore described.

Thence I run

S. $89^{\circ}56'W.$, on a true line,

Bet. secs. 13 and 24.

Descend over rocky and mountainous land, along steep,
 north slope, through heavy timber.

13.50 Hollow, 75 ft. deep, course N.

Ascend along steep, north slope.

40.05 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on N.
 half, S 24 on S. half, from which

A pinon, 10 ins. diam., bears N. $14^{\circ}E.$, 19 lks. dist.
 marked $\frac{1}{4}$ S 13 BT.

A pinon, 8 ins. diam., bears S. $23^{\circ}E.$, 44 lks. dist.,
 marked $\frac{1}{4}$ S 24 BT.

59.50 Rocky spur, projects NW.

Leave timber, bears N. and S.

Abrupt descent.

71.00 Hollow, 150 ft. deep, course NE.

Abrupt ascent.

80.10 The cor. of secs. 13-14-23 and 24.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.10 chs.

October 25, 1910

CHAINS

October 26: At 7h.44m., a.m., 1.m.t., I set off 39°15'N. on lat. arc, 12° 15'S. on decl. arc, and determine a meridian with the solar at the cor. of secs. 13-14-23 and 24. Thence I run N.0°01'W., bet. secs. 13 and 14.

Ascend over rocky and mountainous land along broken, east slope.

40.00 Set iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1/4 S 14 on W. half, S 13 on E. half, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

69.50 Rocky ridge, bears NE. and SW.

Enter heavy timber, bears NE. and SW.

Abrupt descent.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked on brass cap, T 18 S S 11 in NW.,

R 10 E S 12 in NE.,

S 13 in SE. and S 14 in SW. quadrant, from which

A cedar, 12 ins. diam., bears N.78°E., 36 lks. dist. marked T 18 S R 10 E S 12 BT.

A cedar, 7 ins. diam., bears S.35°E., 28 lks. dist., marked T 18 S R 10 E S 13 BT.

A cedar, 5 ins. diam., bears S.56°W., 8 lks. dist., marked T 18 S R 10 E S 14 BT.

A cedar, 10 ins. diam., bears N.44°W., 42 lks. dist. marked T 18 S R 10 E S 11 BT.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS

N.0°01'W.,bet.secs.11 and 12.

Ascend over rocky and mountainous land,through heavy timber.

3.00 Rocky spur,projects NE.

Abrupt descent.

10.50 Enter bottom of Bull Hollow,150 ft.deep,course NW.

Over level land.

14.50 Wash,25 lks.wide,5 ft.deep,course NW.

16.00 Leave Bull Hollow: Begin abrupt ascent over broken ledges.

29.00 Top of abrupt ascent,bears NW.and SE.

Over level land.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 11 on W. half,S 12 on E.half,from which

A cedar,12 ins.diam.,bears N.85°E.,17 lks.dist., marked $\frac{1}{4}$ S 12 BT.

A cedar,13 ins.diam.,bears N.56°W.,47 lks.dist., marked $\frac{1}{4}$ S 11 BT. ✓

80.00 Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.1-2-11 and 12,marked on brass cap

T 18 S S 2 in NW.,

R 10 E S 1 in NE.,

S 12 in SE.and S 11 in SW.quadrant,from which

A pinon,6 ins.diam.,bears N.34°E.,54 lks.dist., marked T 18 S R 10 E S 1 BT.

A pinon,5 ins.diam.,bears S.16°E.,71 $\frac{1}{2}$ lks.dist. marked T 18 S R 10 E S 12 BT.

A pinon,10 ins.diam.,bears S.27°30'W.,56 lks.dist. marked T 18 S R 10 E S 11 BT.

A pinon,9 ins.diam.,bears N.43°W.,126 lks.dist., marked T 18 S R 10 E S 2 BT. ✓

Land,mountainous and level.

Soil,rocky, 3rd.and 4th.rate.

Timber,cedar and pinon.

Mountainous land or heavily timbered on 80.00 chs.

October 26: At this cor.I set off 12°20'S.on decl.arc,

CHAINS

and at 11h.44m.,a.m.,1.m.t.,observe the sun on the meridian,the resulting lat.is 39°16'N.

N.89°58'E.,on a random line,bet.secs.1 and 12.

40.00 Set temp.¼ sec.cor.

80.02 Intersect E.bdy.of Tp.,7 lks.N.of the re-established cor. of secs.1-6-7 and 12,heretofore described.

Thence I run

N.89°59'W.,on a true line,

Bet.secs.1 and 12.

Ascend along broken and rocky,northeast slope,over conglomerate boulders,through scattering timber.

27.20 Top of abrupt ascent,150 ft.above sec.cor.,bears NW.and SE.

Enter heavy timber,bears NW.and SE.

Begin gradual descent over rolling land.

38.00 Leave timber,bears NW.and SE.

40.01 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for ¼ sec.cor.,marked on brass cap,¼ S 1 on N. half,S 12 on S.half,from which

A cedar,18 ins.diam.,bears N.6°W.,106 lks.dist., marked ¼ S 1 BT.

A cedar,6 ins.diam.,bears S.77°W.,170 lks.dist., marked ¼ S 12 BT.

44.00 Enter heavy timber,bears NE.and SW.

50.00 Wash,150 lks.wide,30 ft.deep,course NW.

70.50 Wood road,bears NW.and SE.

80.02 The cor.of secs.1-2-11 and 12.

Land,mountainous and rolling.

Soil,rocky,3rd.and 4th.rate.

Timber,cedar and pinon.

Mountainous land,or heavily timbered on 80.02 chs.

N.0°01'W.,on a random line,bet.secs.1 and 2.

40.00 Set temp:¼ sec.cor.

83.89 Intersect N.bdy.of Tp.,16 lks.W.of the cor.of secs.

CHAINS

- 1-2-35 and 36, heretofore described.
 Thence I run
 S. 0° 06' W., on a true line,
 Bet. secs. 1 and 2.
 Descend over rocky and mountainous land.
- 0.50 Wash, 25 lks. wide, 5 ft. deep, course NW.
 Begin ascent through scattering timber.
- 3.00 Enter heavy timber, bears NW. and SE.
- 23.00 Ridge, bears E. and W.
 Abrupt descent.
- 27.00 Hollow, 75 ft. deep, course W.
 Ascend over broken land.
- 43.89 Top of spur, projects W.
 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 on W. half, S 1 on
 E. half, from which
 A cedar, 4 ins. diam., bears N. 72° E., 40 $\frac{1}{2}$ lks. dist.
 marked $\frac{1}{4}$ S 1 BT.
 A cedar, 15 ins. diam., bears S. 60° W., 35 lks. dist.,
 marked $\frac{1}{4}$ S 2 BT.
 Abrupt descent.
- 47.00 Hollow, 75 ft. deep, course W.
 Abrupt ascent.
- 49.50 Rocky spur, projects W.
 Descend.
- 50.25 Hollow, 50 ft. deep, course NW.
 Gradual ascent.
- 72.00 Wood road, bears NW. and SE.
- 83.89 The cor. of secs. 1-2-11 and 12.
 Land, mountainous and rolling.
 Soil, rocky, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Mountainous land or heavily timbered on 83.89 chs.

October 26, 1910

CHAINS	
	<p>October 27: At 7h.44m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $12^{\circ}34'S.$ on decl. arc, and determine a meridian with the solar at the re-established cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp.</p>
	<p>Thence I run $N.0^{\circ}01'W.$, bet. secs. 34 and 35.</p>
	<p>Over level land, through sparse undergrowth.</p>
31.00	<p>Leave level land; begin abrupt ascent over broken sandstone ledges, bearing E. and W.</p>
36.60	<p>Top of abrupt ascent, 200 ft. high, bears E. and W. Ascend over rocky land, through scattering timber.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on W. half, S 35 on E. half, from which A pinon, 6 ins. diam. bears $S.69^{\circ}E.$, 15 lks. dist., marked $\frac{1}{4}$ S 35 BT. A pinon, 7 ins. diam., bears $N.6^{\circ}30'W.$, 57 lks. dist. marked $\frac{1}{4}$ S 34 BT.</p>
41.50	<p>Spur, projects SW. Descend.</p>
44.00	<p>Hollow, 50 ft. deep, course SW. Ascend.</p>
47.50	<p>Spur, projects SW. Descend. Leave timber.</p>
52.50	<p>Hollow, 100 ft. deep, course SW. Ascend over solid sandstone.</p>
66.00	<p>Begin abrupt ascent over broken ledges, bearing NW. and SE.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked on brass cap, T 18 S S 27 in NW., R 10 E S 26 in NE., S 35 in SE. and S 34 in SW. quadrant, from which A pinon, 8 ins. diam., bears $N.81^{\circ}E.$, 221 lks. dist., marked T 18 S R 10 E S 26 BT. A pinon, 6 ins. diam., bears $S.84^{\circ}30'E.$, 89 lks. dist., marked T 18 S R 10 E S 35 BT.</p>

CHAINS

- No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Pits impracticable. ✓
- Land, level and mountainous.
- Soil, sandy loam, 1st. rate on 31.00 chs.
balance, rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.
- Undergrowth, sage brush.
- Mountainous land on 49.00 chs.
-
- East, on a random line, bet. secs. 26 and 35.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 25-26-35 and 36.
- Thence I run
S. $89^{\circ}58'$ W., on a true line,
Bet. secs. 26 and 35.
- Ascend over rocky and mountainous land.
- 2.00 Enter scattering timber and conglomerate boulders.
- 10.60 Top of abrupt ascent, 150 ft. above sec. cor., bears NW. and SE.
- Enter heavy timber, bears NW. and SE.
- Over level land.
- 18.80 Leave level land and timber, bears N. and S.
- Begin abrupt descent over boulders, through scattering timber.
- 30.00 Leave timber.
- 40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on N. half, S 35 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- Pits impracticable. ✓
- 43.00 Hollow, 250 ft. deep, course SW.
- Abrupt ascent over ledges.
- 50.50 Enter scattering timber.
- 56.40 Spur, projects S.

CHAINS

A cedar, 6 ins. diam., bears N. 64° E., 7 lks. dist.,
marked T 18 S R 10 E S 23 BT.

A pinon, 7 ins. diam., bears S. 7° E., 84 lks. dist.,
marked T 18 S R 10 E S 26 BT.

A pinon, 8 ins. diam., bears S. 49° W., 70 lks. dist.,
marked T 18 S R 10 E S 27 BT.

A cedar, 11 ins. diam., bears N. 89° W., 55 lks. dist.,
marked T 18 S R 10 E S 22 BT.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

N. 89° 58' E., on a random line, bet. secs. 23 and 26.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line, 3 lks. S. of the cor. of secs.
23-24-25 and 26.

Thence I run

S. 89° 57' W., on a true line,

Bet. secs. 23 and 26.

Descend over rocky and mountainous land.

6.50 Hollow, 200 ft. deep, course N.

Abrupt ascent over conglomerate boulders, through
scattering timber.

35.00 Ridge, bears N. and S.

Descend along steep, broken south slope over huge
conglomerate ledges.

40.04 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on N.
half, S 26 on S. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

80.08 The cor. of secs. 22-23-26 and 27.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

CHAINS

Mountainous land on 80.08 chs.

N.0°01'W.,bet.secs.22 and 23.

Ascend abruptly over huge conglomerate boulders,through scattering timber.

13.00 Rocky ridge,bears NE.and SW.

Abrupt descent.

16.00 Head of hollow,course NW.

Abrupt ascent.

22.25 Rocky spur,projects NW.

Abrupt descent.

26.00 Hollow,75 ft.deep,course NW.

Abrupt ascent.

29.00 Ridge,bears NW.and SE.

Descend along steep west slope over conglomerate ledges.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 22 on W. half,S 23 on E.half,from which

A cedar,7 ins.diam.,bears N.65°W.,7 lks.dist., marked $\frac{1}{4}$ S 22 BT.

A pinon,5 ins.diam.,bears N.57°E.,59 lks.dist., marked $\frac{1}{4}$ S 23 BT.

80.00 Set an iron post,3 ft.long,2 ins.dia.,in mound of stone and earth,for cor.of secs.14-15-22 and 23,marked on brass cap,T 18 S S 15 in NW.,

R 10 E S 14 in NE.,

S 23 in SE.and S 22 in SW.quadrant,from which

A pinon,10 ins.diam.,bears N.68°E.,88 lks.dist., marked T 18 S R 10 E S 14 BT.

A pinon,6 ins.diam.,bears S.59°E.,111 lks.dist., marked T 18 S R 10 E S 23 BT.

A pinon,14 ins.diam.,bears S.16°W.,41 lks.dist., marked T 18 S R 10 E S 22 BT.

A pinon,6 ins.diam.,bears N.29°W.,74 lks.dist., marked T 18 S R 10 E S 15 BT.

Note:

On account of natural obstacles it is impossible to

CHAINS

set this post in the ground.

Land, mountainous.

Soil, rocky, 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

October 27, 1910.

October 28: At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}15'N.$ on lat. arc, $12^{\circ}55'S.$ on decl. arc, and determine a meridian with the solar at the cor. of secs. 14-15-22 and 23.

Thence I run

$N. 89^{\circ}57' E.$, on a random line, bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 13-14-23 and 24.

Thence I run

$S. 89^{\circ}59' W.$, on a true line,

Bet. secs. 14 and 23.

Ascend abruptly over rocky and mountainous land, over conglomerate boulders.

40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on N. half, S 23 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable. ✓

46.00 Ridge, bears N. and S.

Abrupt descent over conglomerate ledges, through scattering timber.

80.06 The cor. of secs. 14-15-22 and 23.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.06 chs.

CHAINS

N.0°01'W.,bet.secs.14 and 15.

Descend along west slope,over solid conglomerate ledges and mountainous land,through heavy timber.

40.00 Set an iron post,3 ft.long,1 in.dia.,in mound of stone and earth,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 15 on W.half,S 14 on E.half,from which

A pinon,7 ins.diam.,bears S.58°E.,27 lks.dist., marked $\frac{1}{4}$ S 14 BT.

A pinon,7 ins.diam.,bears S.32°W.,15 lks.dist., marked $\frac{1}{4}$ S 15 BT.

Note:

On account of natural obstacles it is impossible to set this post in the ground.

77.00 Wash,200 lks.wide,25 ft.deep,course NW.

80.00 Set an iron post,3 ft.long,2 ins.dia.,in mound of stone and earth,for cor.of secs.10-11-14 and 15,marked on brass cap,T 18 S S 10 in NW.,

R 10 E S 11 in NE.,

S 14 in SE.and S 15 in SW.quadrant,from which

A cedar,6 ins.diam.,bears N.14°E.,22 $\frac{1}{2}$ lks.dist., marked T 18 S R 10 E S 11 BT.

A pinon,6 ins.diam.,bears S.1°E.,47 lks.dist., marked T 18 S R 10 E S 14 BT.

A cedar,20 ins.diam.,bears S.36°W.,53 lks.dist., marked T 18 S R 10 E S 15 BT.

A cedar,18 ins.diam.,bears N.74°W.,26 lks.dist., marked T 18 S R 10 E S 10 BT.

Note:

On account of natural obstacles it is impossible to set this post in the ground.

Land,mountainous.

Soil,solid conglomerate ledges, 4th.rate.

Timber,cedar and pinon.

Mountainous land or heavily timbered on 80.00 chs.

CHAINS

N.89°59'E., on a random line, bet. secs. 11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 11-12-13 and 14.

Thence I run

N.89°59'W., on a true line,

Bet. secs. 11 and 14.

Ascend abruptly over rocky and mountainous land, over conglomerate ledges, through heavy timber.

6.87 Rocky spur, projects N.

Leave ledges; descend.

18.00 Wash, 200 lks. wide, 30 ft. deep, course N.

Over solid conglomerate ledges.

40.02 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on N. half, S 14 on S. half, from which

A pinon, 12 ins. diam., bears S.48°E., 93 lks. dist., marked $\frac{1}{4}$ S 14 BT.

A pinon, 15 ins. diam., bears N.33°W., 168 lks. dist., marked $\frac{1}{4}$ S 11 BT.

Note:

On account of natural obstacles it is impossible to set this post in the ground.

44.25 Hollow, 75 ft. deep, course N.

Ascend.

62.00 Ridge, bears N. and S.

Descend over solid ledges.

80.04 The cor. of secs. 10-11-14 and 15.

Land, mountainous.

Soil, rocky and solid conglomerate ledges, 4th. rate.

Timber, cedar and pinon.

Mountainous land and heavily timbered on 80.04 chs.

October 28: At this cor. I set off 13°00' S. on decl. arc, and at 11h. 44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°16' N.

CHAINS

N.0°01'W., bet. secs. 10 and 11.

Descend over solid conglomerate ledges, along west slope through heavy timber.

21.50 Wash, 100 lks. wide, 15 ft. deep, course NW.

32.00 South side of wash, course NW.

33.70 Bottom of wash, 50 ft. deep, course NW.

36.00 North side of same wash, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap. $\frac{1}{4}$ S 10 on W. half, S 11 on E. half, from which

A pinon, 8 ins. diam., bears S. 36° W., 46 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 10 BT.

A pinon, 8 ins. diam., bears N. 69° E., 44 lks. dist., marked $\frac{1}{4}$ S 11 BT. ✓

Note:

On account of natural obstacles it is impossible to set this post in the ground.

62.00 Leave heavy timber, bears NE. and SW.

Enter scattering timber.

68.75 Leave rocky land and timber, bears NE. and SW.

Over level land, through sparse undergrowth.

79.85 Wash, from Bull Hollow, 25 lks. wide, 5 ft. deep, course NW.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked on brass cap T 18 S S 3 in NW.,

R 10 E S 2 in NE.,

S 11 in SE. and S 10 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, mountainous and level.

Soil, solid conglomerate ledges on 68.75 chs., 4th. rate.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, greasewood and sage brush.

Mountainous land on 68.75 chs.

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS	S.89°59'E., on a random line, bet. secs. 2 and 11.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 1-2-11 and 12. Thence I run West, on true line, bet. secs. 2 and 11. Descend over mountainous land and solid conglomerate, through heavy timber.
39.98	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 on N. half, S 11 on S. half, from which A pinon, 6 ins. diam., bears S. 24° W., 34 lks. dist., marked $\frac{1}{4}$ S 11 BT. A pinon, 14 ins. diam., bears N. 5° W., 69 lks. dist., marked $\frac{1}{4}$ S 2 BT.
73.50	Leave rocky land, and timber, bears NE. and SW. Over level land, through sparse undergrowth.
79.96	The cor. of secs. 2-3-10 and 11. Land, mountainous and level. Soil, solid conglomerate ledges on 73.50 chs. balance, loam, 1st. rate. Timber, cedar and pinon. Undergrowth, greasewood and sage brush. Mountainous land and heavily timbered on 73.50 chs.

40.00	N. 0° 01' W., on a random line, bet. secs. 2 and 3. Set temp. $\frac{1}{4}$ sec. cor.
84.59	Intersect N. bdy. of Tp., 19 lks. E. of the cor. of secs. 2-3-34 and 35, heretofore described. Thence I run S. 0° 09' E., on a true line, Bet. secs. 2 and 3. Ascend abruptly over rocky and mountainous land.
4.25	Rocky ridge, bears E. and W. Abrupt descent.
11.50	Wood road bears NW. and SE. in hollow, 75 ft. deep, course W.

CHAINS	
30.00	Ascend through scattering timber. Ridge, bears NE. and SW. Leave timber. Descend.
38.00	Foot of descent, bears NE. and SW. Over level land, through sparse undergrowth.
44.59	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 on W. half S 2 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓
84.59	The cor. of secs. 2-3-10 and 11. Land, mountainous and level. Soil, rocky, 3rd. rate on 38.00 chs. balance, loam, 1st. rate. Timber, cedar and pinon. Undergrowth, greasewood and sage brush. Mountainous land on 38.00 chs.
October 28, 1910	
October 29: At 7h. 44m., a.m., 1.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $13^{\circ}15'S.$ on decl. arc, and determine a meridian with the solar at the re-established cor. of secs. 3-4-33 and 34, heretofore described.	
Thence I run	
$N. 0^{\circ}02'W.$, bet. secs. 33 and 34.	
Over level land, through sparse undergrowth.	
12.25	Road from Green River to Huntington, bears NW. and SE.
18.00	Begin abrupt ascent over broken sandstone ledges bearing NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 33 on W. half, S 34 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. ✓
54.00	Rocky ridge, 500 ft. above sec. cor., bears E. and W. Descend over solid conglomerate ledges, along west slope

CHAINS

through scattering timber.

80.00

Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 27-28-33 and 34, marked on brass cap, T 18 S S 28 in NW.,

R 10 E S 27 in NE.,

S 34 in SE. and S 33 in SW. quadrant, from which

A pinon, 12 ins. diam., bears N. 30° E., 96 lks. dist., marked T 18 S R 10 E S 27 BT.

A pinon, 11 ins. diam., bears S. 33° 30' E., 138 lks. dist., marked T 18 S R 10 E S 34 BT.

A cedar, 5 ins. diam., bears S. 61° W., 25 lks. dist., marked T 18 S R 10 E S 33 BT.

A pinon, 6 ins. diam., bears N. 15° W., 43 lks. dist., marked T 18 S R 10 E S 28 BT.

Note:

On account of natural obstacles it is impossible to set this post in the ground.

Land, level and mountainous.

Soil, loam, 1st. rate on 18.00 chs.

balance, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 62.00 chs.

East, on a random line, bet. secs. 27 and 34.

40.00

Set temp. $\frac{1}{4}$ sec. cor.

80.08

Intersect N. and S. line, 7 lks. N. of the cor. of secs. 26-27-34 and 35.

Thence I run

N. 89° 57' W., on a true line,

Bet. secs. 27 and 34.

Descend abruptly along steep, south slope over broken ledges, through scattering timber.

40.04

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 27 on N. half, S 34 on S. half, from which

A cedar, 12 ins. diam., bears N. 71° E., 142 lks. dist.,

CHAINS	
	marked $\frac{1}{4}$ S 27 BT. A cedar, 10 ins. diam., bears S. 78° W., 132 lks. dist., marked $\frac{1}{4}$ S 34 BT.
41.25	Hollow, 300 ft. deep, course S. Abrupt ascent over broken ledges.
65.22	Ridge, bears NE. and SW. Descend over solid conglomerate ledges.
80.08	The cor. of secs. 27-28-33 and 34. Land, mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 80.08 chs. October 29: At this cor. I set off 13° 20' S. on decl. arc, and at 11h. 44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 13' N.
	————— N. 0° 02' W., bet. secs. 27 and 28.
	Descend over solid conglomerate ledges, along west slope, through scattering timber.
8.75	Wash, 200 lks. wide, 20 ft. deep, course NW.
12.50	Wash, 250 lks. wide, 30 ft. deep, course NW.
20.75	Hollow, 75 ft. deep, course NW. Ascend.
24.50	Rocky spur, projects NW. Descend.
32.50	Hollow, 75 ft. deep, course NW. Ascend.
35.75	Rocky spur, projects NW. Descend.
38.75	Hollow, 75 ft. deep, course W. Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 28 on W. half, S 27 on E. half, from which A pinon, 11 ins. diam., bears N. 45° W., 11 lks. dist., marked $\frac{1}{4}$ S 28 BT.

CHAINS

A pinon, 5 ins. diam., bears N. 57° E., 57 lks. dist.
 marked $\frac{1}{4}$ S. 27 BT.

46.00 Rocky spur, projects W.
 Descend along west slope.

63.50 Hollow, 75 ft. deep, course W.
 Ascend.

70.25 Ridge, bears NW. and SE.
 Descend abruptly over boulders.

74.75 Hollow, 150 ft. deep, course NW.
 Abrupt ascent.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
 ground, for cor. of secs. 21-22-27 and 28, marked on brass
 cap, T 18 S S 21 in NW.,
 R 10 E S 22 in NE.,
 S 27 in SE. and S 28 in SW. quadrant, from which

A cedar, 11 ins. diam., bears N. 67° E., 86 lks. dist.,
 marked T 18 S R 10 E S 22 BT.

A pinon, 6 ins. diam., bears S. 76° E., 23 lks. dist.,
 marked T 18 S R 10 E S 27 BT.

A cedar, 5 ins. diam., bears S. 60° W., 116 lks. dist.
 marked T 18 S R 10 E S 28 BT.

A cedar, 6 ins. diam., bears N. 39° W., 78 lks. dist.,
 marked T 18 S R 10 E S 21 BT. ✓

Land, mountainous.

Soil, conglomerate ledges, 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89° 57' E., on a random line, bet. secs. 22 and 27.

40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.08 Intersect N. and S. line, 5 lks. S. of the cor. of secs.

22-23-26 and 27.

Thence I run

N. 89° 59' W., on a true line,

Bet. secs. 22 and 27.

Descend along steep, south slope, over huge conglomerate

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS	
	boulders, through scattering timber.
19.00	Hollow, 100 ft. deep, course SW.
	Abrupt ascent over huge boulders.
28.00	Ridge, bears NE. and SW.
	Enter heavy timber, bears NE. and SW.
	Descend along north slope.
39.50	Head of hollow, course NW.
	Ascend.
40.04	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on N.
	half, S 27 on S. half, from which
	A pinon, 12 ins. diam., bears S. 47° W., 117 lks. dist.
	marked $\frac{1}{4}$ S 27 BT.
	A pinon, 10 ins. diam., bears N. 20° W., 60 lks. dist,
	marked $\frac{1}{4}$ S 22 BT.
45.00	Spur, projects NW.
	Descend.
63.00	Head of hollow, course NW.
	Ascend.
75.00	Ridge, bears NW. and SE.
	Leave heavy timber, bears NW. and SE.
	Abrupt descent along steep, south slope, through scattering
	timber.
80.08	The cor. of secs. 21-22-27 and 28.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	Timber, cedar and pinon.
	Mountainous land on 80.08 chs.
	<u>N. 0° 02' W., bet. secs. 21 and 22.</u>
	Ascend abruptly over broken ledges, through scattering
	timber.
3.00	Ridge, bears NW. and SE.
	Descend along west slope over solid conglomerate ledges.
40.00	Set an iron post, 3 ft. long, 1 in. dia., in mound of stone
	and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 21 on

CHAINS

on W. half, S. 22 on E. half, from which

A pinon, 6 ins. diam., bears S. 15° W., 38 lks. dist.,
marked $\frac{1}{4}$ S 21 BT.

A pinon, 5 ins. diam., bears S. 14° E., 34 lks. dist.,
marked $\frac{1}{4}$ S 22 BT.

Note:

On account of natural obstacles it is impossible to
set this post in the ground.

64.00 Wash, 250 lks. wide, 40 ft. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone
and earth, for cor. of secs. 15-16-21 and 22, marked on brass
cap, T 18 S S 16 in NW.,

R 10 E S 15 in NE.,

S 22 in SE. and S 21 in SW. quadrant, from which

A pinon, 4 ins. diam., bears N. 77° E., 62 lks. dist.,
marked T 18 S R 10 E S 15 BT.

A pinon, 5 ins. diam., bears S. 57° 30' E., 66 lks. dist.,
marked T 18 S R 10 E S 22 BT.

A pinon, 6 ins. diam., bears S. 53° W., 32 lks. dist.,
marked T 18 S R 10 E S 21 BT.

A pinon, 5 ins. diam., bears N. 7° 30' W., 235 lks. dist.,
marked T 18 S R 10 E S 16 BT.

Note:

On account of natural obstacles it is impossible
to set this post over 6 ins. in the ground.

Land, mountainous.

Soil, solid conglomerate ledges, 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

October 29, 1910

October 30: At 7h. 44m., a.m., l.m.t., I set off 39° 15' N.
on lat. arc, 13° 35' S. on decl. arc, and determine a meridian
with the solar at the cor. of secs. 15-16-21 and 22.

Thence I run

S. 89° 59' E., on a random line, bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, 3 lks. S. of the cor. of secs.

CHAINS

14-15-22 and 23.

Thence I run

West, on a true line, bet. secs. 15 and 22.

Descend over solid conglomerate ledges and mountainous land, through heavy timber.

21.00 Hollow, 50 ft. deep, course NW.

Ascend.

22.25 Spur, projects NW:

Descend.

40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on N. half, S 22 on S. half, from whichA pinon, 10 ins. diam., bears N. 64° E., 24 lks. dist., marked $\frac{1}{4}$ S 15 BT.A pinon, 5 ins. diam., bears S. 9° 30' W., 42 lks. dist., marked $\frac{1}{4}$ S 22 BT.

50.00 Hollow, 75 ft. deep, course NW.

Ascend.

52.00 Rocky spur, projects NW.

Descend over solid conglomerate ledges.

80.06 The cor. of secs. 15-16-21 and 22.

Land, mountainous.

Soil, solid conglomerate, 4th. rate.

Timber, cedar and pinon.

Mountainous land and heavily timbered on 80.06 chs.

N. 0° 02' W., bet. secs. 15 and 16.

Descend over solid conglomerate ledges, and mountainous land, through heavy timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 16 on W. half, S 15 on E. half, from whichA pinon, 7 ins. diam., bears N. 23° W., 18 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 16 BT.A pinon, 10 ins. diam., bears N. 35° E., 15 lks. dist., marked $\frac{1}{4}$ S 15 BT.

CHAINS

- 41.60 .Hollow, 75 ft. deep, course NW., 5.00 chs. NW. to mouth.
Ascend.
- 44.00 Begin descent.
- 56.50 Foot of descent, bears NE. and SW.
Leave rocky land and timber, bears NE. and SW.
Over level land, through sparse undergrowth.
- 78.00 Begin abrupt ascent over broken ledges, bearing NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
ground, for cor. of secs. 9-10-15 and 16, marked on brass
cap, T 18 S S 9 in NW.,
R 10 E S 10 in NE.,
S 15 in SE. and S 16 in SW. quadrant, and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate on 58.50 chs.
balance, loam, 1st. rate.
Timber, cedar and pinon.
Undergrowth, greasewood and sage brush.
Mountainous land on 56.50 chs.
-
- East, on a random line, bet. secs. 10 and 15.
- 40.00 Set temp. ¼ sec. cor.
- 80.08 Intersect N. and S. line, 3 lks. S. of the cor. of secs.
10-11-14 and 15.
Thence I run
S. 89° 59' W., on a trueline,
Bet. secs. 10 and 15.
Descend over solid conglomerate rock and mountainous
land, through heavy timber.
- 3.25 Middle of wash, 200 lks. wide, 15 ft. deep, course NW.
- 40.04 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone
and earth, for ¼ sec. cor., marked on brass cap, ¼ S 10 on
N. half, S 15 on S. half, from which
A pinon, 6 ins. diam., bears N. 21° W., 85 lks. dist.
marked ¼ S 10 BT.

CHAINS

- A. pinon, 7 ins. diam., bears S. 1° W., 61 1/2 lks. dist.,
marked $\frac{1}{4}$ S 15 BT.
- Note:
On account of natural obstacles it is impossible
to set this post in the ground.
- 62.30 Leave rocky land and timber, bears NE. and SW.
Over level land through sparse undergrowth.
- 77.50 Begin abrupt ascent over broken ledges, bearing NE. and SW.
- 80.08 The cor. of secs. 9-10-15 and 16.
Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate on 64.88 chs.
balance, loam, 1st. rate.
Mountainous land on 64.88 chs.
- N. 0° 02' W., bet. secs. 9 and 10.
Ascend abruptly over mountainous land along steep, east
and rocky slope.
- 2.00 Rocky spur, projects E.
Abrupt descent.
- 4.75 Hollow, 50 ft. deep, course E.
Abrupt ascent.
- 8.00 Rocky spur, projects E.
Descend.
- 18.00 Hollow, 50 ft. deep, course E.
Ascend.
- 28.50 Spur, projects E.
Enter scattering timber.
Descend.
- 32.00 Leave timber.
- 34.50 Foot of descent bears E. and W.
Over level land, through sparse undergrowth.
- 40.00 Set an iron post, 3 ft. long, lin. dia., 26 ins. in the ground
for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 9 on W. half, S. 10
on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft.
dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high,
W. of cor.
- 67.00 Wood road bears E. and W.

CHAINS

- 75.00 Begin abrupt ascent along rocky E. slope.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 3-4-9 and 10, marked on brass cap, T 18 S S 4 in NW.,
R 10 E S 3 in NE.,
S 10 in SE. and S 9 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable. ✓
- Note:
On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.
- Land, mountainous and level.
- Soil, 3rd. and 4th. rate on 38.50 chs.
balance, loam, 1st. rate.
- Timber, cedar and pinon.
- Undergrowth, greasewood and sage brush.
- Mountainous land on 38.50 chs.
- October 30: At this cor. I set off $13^{\circ}40'S$. on decl. arc, and at 11h. 44m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}16'N$.
-
- N. $89^{\circ}59'E$., on a random line, bet. secs. 3 and 10.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.02 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 2-3-10 and 11.
Thence I run
N. $89^{\circ}56'W$., on a trueline,
Bet. secs. 3 and 10.
Over level land, through sparse undergrowth.
- 0.25 Wash, from Bull Hollow, 20 lks. wide, 5 ft. deep, course NW.
- 40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 on N. half, S 10 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 70.00 Begin ascent over rocky, land, bears NE. and SW.

CHAINS

- 20.02 The cor. of secs. 3-4-9 and 10.
Land, level and rolling.
Soil, loam, 1st. rate on 70.00 chs.
balance, rocky, 3rd. rate.
No timber.
Undergrowth, greasewood and sage brush.
-
- N. 0°02' W., on a random line, bet. secs. 3 and 4.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 25.68 Intersect N. bdy. of Tp., 43 lks. E. of the cor. of secs. 3-4-33 and 34, heretofore described.
Thence I run
S. 0°20' E., on a true line,
Bet. secs. 3 and 4.
Over level land, through sparse undergrowth.
- 45.68 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 4 on W. half, S 3 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 47.05 Wood road, bears NW. and SE.
- 60.25 Wood road, bears E. and W.
- 65.50 Begin ascend over rocky east slope, bearing NW. and SE., through scattering timber.
- 75.00 Leave timber.
- 85.68 The cor. of secs. 3-4-9 and 10.
Land, level and rolling.
Soil, loam, 1st. rate on 65.50 chs.
balance, rocky, 3rd. rate.
Timber, cedar and pinon.
Undergrowth, greasewood and sage brush.

October 30: 1910

October 31: At 7h. 40m., a.m., l.m.t., I set off 39°12' N. on lat. arc, 13°55' S. on decl. arc, and determine a meridian with the solar at the re-established cor. of secs. 4-5-32

CHAINS

and 33, hertofore described on S. bdy. of Tp.

Thence I run

N. 0° 03' W., bet. secs. 32 and 33.

Descend abruptly over conglomerate ledges and boulders through scattering timber.

31.50 Foot of abrupt descent, bears NW. and SE.

Leave ledges, boulder and timber.

Over level land, through sparse undergrowth, in bottom of Buckhorn Draw, 300 ft. deep, course SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground

for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on W. half, S 33

on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft.

dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

45.75 Wash, 20 lks. wide, 6 ft. deep, course SE.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

ground, for cor. of secs. 28-29-32 and 33, marked on brass cap, T 18 S S 29 in NW.,

R 10 E S 28 in NE.,

S 33 in SE. and S 29 in SW. quadrant, dig pits, 18x18x12 ins.

in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth,

4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 31.50 chs.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, greasewood and sage brush.

Mountainous land on 31.50 chs.

East, on a random line, bet. secs. 28 and 33.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs.

27-28-33 and 34.

Thence I run

S. 89° 59' W., on a true line,

CHAINS

. Bet. secs. 28 and 33.

Descend over solid conglomerate ledges, through scattering timber.

- 4.50 Wash, 100 lks. wide, 20 ft. deep, course NW.
- 15.25 Begin abrupt descent, bears NW. and SE.
- 36.00 Hollow, 100 ft. deep, course NW.
Abrupt ascent.
- 39.98 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 28 on N. half, S 33 on S. half, from which
A cedar, 7 ins. diam., bears N. 24° E., 35 lks. dist., marked $\frac{1}{4}$ S 28 BT.
A cedar, 5 ins. diam., bears S. 23° W., 22 lks. dist., marked $\frac{1}{4}$ S 33 BT.

- 41.00 Rocky spur, projects NW.
Abrupt descent.
- 56.00 Foot of abrupt descent, bears NW. and SE.
Leave rocky land and timber.
Enter bottom of Buck horn Draw, 300 ft. deep, course SE.
Over level land, through sparse undergrowth.

- 61.25 Road from Green River to Huntington, bears NW. and SE.
- 79.96 The cor. of secs. 28-29-32 and 33.

Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate on 56.00 chs.
balance, loam, 1st. rate.
Timber, cedar and pinon.
Undergrowth, greasewood and sage brush.
Mountainous land on 56.00 chs.
October 31: At this cor. I set off 14° 00' S., on decl. arc and at 11h. 44m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 39° 13' N.

N. 0° 03' W., bet. secs. 28 and 29.

Over level land in bottom of Buckhorn Draw, through sparse undergrowth.

CHAINS

- 19.00 Wash, 20 lks. wide, 6 ft. deep, course SW.
- 38.75 Begin abrupt ascent over broken ledges and boulders, bearing NE. and SW., through scattering timber.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor. marked on brass cap, $\frac{1}{4}$ S 29 on W. half, S 28 on E. half, from which
- A cedar, 5 ins. diam., bears N. 31° W., 94 $\frac{1}{2}$ lks. dist. marked $\frac{1}{4}$ S 29 BT.
- A cedar, 4 ins. diam., bears N. 6° E., 63 $\frac{1}{2}$ lks. dist., marked $\frac{1}{4}$ S 28 BT.
- Note:
On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.
- 49.75 Rocky ridge, bears NE. and SW.
Descend along west slope.
- 62.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 64.00 Rocky spur, projects NW.
Descend along west slope.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 20-21-28 and 29, marked on brass cap, T 18 S S 20 in NW.,
R 10 E S 21 in NE.,
S 28 in SE. and S 29 in SW. quadrant, from which
- A cedar, 9 ins. diam., bears N. 39° E., 11 lks. dist., marked T 18 S R 10 E S 21 BT.
- A pinon, 10 ins. diam., bears S. 7° E., 105 lks. dist. marked T 18 S R 10 E S 28 BT.
- A pinon, 12 ins. diam., bears S. 42° W., 91 lks. dist. marked T 18 S R 10 E S 29 BT.
- A cedar, 11 ins. diam., bears N. 48° W., 135 lks. dist., marked T 18 S R 10 E S 20 BT.

Note:
On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

Land, level and mountainous.
Soil, loam, 1st. rate on 38.75 chs.

CHAINS

- balance, rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.
- Undergrowth, greasewood and sage brush.
- Mountainous land on 41.25 chs.
-
- N. 89°59'E., on a random line, bet. secs. 21 and 28.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.94 Intersect N. and S. line, 9 lks. N. of the cor. of secs. 21-22-27 and 28.
- Thence I run
- N. 89°57'W., on a true line,
- Bet. secs. 21 and 28.
- Descend over rocky and mountainous land, along steep south slope and broken conglomerate ledges, through scattering timber.
- 6.60 Hollow, 150 ft. deep, course NW.
- Abrupt ascent along steep, north slope.
- 32.00 Rocky ridge, bears NW. and SE.
- Descend over solid conglomerate ledges.
- 39.97 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 21 on N. half, S 28 on S. half, from which
- A cedar, 10 ins. diam., bears S. 40°E., 69 lks. dist., marked $\frac{1}{4}$ S 28 BT.
- A cedar, 8 ins. diam., bears N. 36°W., 24 lks. dist., marked $\frac{1}{4}$ S 21 BT. ✓
- 53.00 Enter bottom of Buckhorn Draw, 200 ft. deep, course S.
- Leave rocky land and timber, bears N. and S.
- Over level land, through sparse undergrowth.
- 60.60 Road from Green River to Huntington, bears NW. and SE.
- 65.50 Wash, 30 lks. wide, 5 ft. deep, course S.
- 66.00 Leave Buckhorn Draw.
- Begin abrupt ascent over broken conglomerate ledges and boulders, through scattering timber.
- 71.00 Rocky spur, projects N.
- Descend.

CHAINS
79.94

The cor. of secs. 20-21-28 and 29.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 66.94 chs.

Balance, loam, 1st rate.

Timber, cedar and pinon.

Undergrowth, greasewood and sage brush.

Mountainous land on 66.94 chs.

 N.0°03'W., bet. secs. 20 and 21.

Over rocky and mountainous land, descend along west slope through scattering timber.

26.15 Enter bottom of Buckhorn Draw, 100 ft. deep, course SE.

Leave timber and rocky land.

Over level land, through sparse undergrowth.

34.50 Leave Buckhorn Draw, ; begin abrupt ascent over ledges, bearing NW. and SE.

35.00 Top of abrupt ascent, bears NW. and SE.

The NE. end of the Buckhorn Reservoir dam, bears W. 3.90 chs. dist., from the NE. end of dam, the dam extends

6.20 chs., S. 18° W., to SW. end of dam, height of dam,

40 ft.

The reservoir at time of survey covered a portion of the E. half of sec. 20.

Gradual ascent over solid ledges.

39.75 Leave solid ledges, bearing NE. and SW.

Over sandy land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 20 on W. half, S 21 on E. half, from which

A lone cedar, 8 ins. diam., bears S. 73° E., 179 lks.

dist., marked $\frac{1}{4}$ S 21 BT.No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

45.25 Road from Green River to Huntington, bears NW. and SE.

47.50 Rocky spur, projects NW.

SUBDIVISIONS OF T.18 S, R.10 E.

CHAINS	
	Descend.
50.00	Enter level land, bearing NE. and SW. Leave rocky land, through sparse undergrowth.
65.00	Road from Green River to Huntington, bears NE. and SW.
68.50	Same road, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked on brass cap, T 18 S S 17 in NW., R 10 E S 16 in NE., S 21 in SE. and S 20 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, mountainous and level. Soil, rocky, 3rd. and 4th. rate on 36.90 chs. balance, loam, 1st. rate.
	Timber, cedar and pinon.
	Mountainous land on 35.00 chs.
	October 31, 1910
	November 1: At 7h. 44m., a.m., l.m.t., I set off 39°15' N. on lat. arc, 14°14' S. on decl. arc, and determine a meridian with the solar at the cor. of secs. 16-17-20 and 21.
	Thence I run
	S. 89°57' E., on a random line, bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
79.92	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 15-16-21 and 22.
	Thence I run
	N. 89°59' W., on a true line,
	Bet. secs. 16 and 21.
	Descend over mountainous land and solid conglomerate ledges, through scattering timber.
37.00	Hollow, 100 ft. below sec. cor., course NW.
	Ascend.
39.50	Rocky spur, projects NW.
	Descend.

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS

- 39.96 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 16 on N. half, S 21 on S. half, from which
- A cedar, 5 ins. diam., bears N.15°30'W., 19 lks. dist. marked $\frac{1}{4}$ S 16 BT.
- A cedar, 9 ins. diam., bears S.66°W., 17 lks. dist., marked $\frac{1}{4}$ S 21 BT.
- 46.00 Leave timber.
- 49.50 Leave mountainous and rocky land, bears NE. and SW. Over level land, through sparse undergrowth.
- 79.92 The cor. of secs. 16-17-20 and 21.
- Land, mountainous and rolling.
- Soil, rocky, 3rd. and 4th. rate on 49.50 chs.
- balance, loam, 1st. rate.
- Timber, cedar and pinon.
- Undergrowth, greasewood and sage brush.
- Mountainous land on 49.50 chs.
-
- N.0°03'W., bet. secs. 16 and 17.
- Over level land, through sparse undergrowth.
- 18.75 Wash, 15 lks. wide, 8 ft. deep, course SW.
- 24.00 Top of E. slope of knoll 50 ft. high, 2.50 chs. W. of line.
- 36.00 Wash, 25 lks. wide, 7 ft. deep, course SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 17 on W. half, S 16 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 58.50 Begin abrupt ascent over broken ledges, bearing NE. and SW.
- 61.20 Rocky spur, projects SW.
- Enter heavy timber, bears NE. and SW.
- Abrupt descent.
- 72.00 Leave timber, bears NE. and SW.
- 76.00 Enter level land, bears NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked on brass cap

SUBDIVISION OF T. 18 S., R. 10 E.

CHAINS

T 18 S S 8 in NW.,
 R 10 E S 9 in NE.,
 S 16 in SE. and S 17 in SW. quadrant, dig pits, 18x18x12 ins.,
 in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth,
 4 ft. base, 2 ft. high, W. of cor.
 Land, level and mountainous.
 Soil, loam, 1st. rate on 62.50 chs.
 balance, rocky, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Undergrowth, greasewood and sage brush.
 Mountainous land on 17.50 chs.

S. 89°59'E., on a random line, bet. secs. 9 and 16.

40.00

Set temp. $\frac{1}{4}$ sec. cor.

79.90

Intersect N. and S. line, 3 lks. S. of the cor. of secs.
 9-10-15 and 16.

Thence I run

West, on a true line, bet. secs. 9 and 16.

Ascend abruptly over broken ledges.

2.00

Spur, projects S.

Descend over mountainous land.

2.50

Enter scattering timber.

10.00

Leave timber.

13.00

Hollow, 75 ft. deep, course SW.

Ascend.

16.00

Spur, projects SW.

Descend.

24.00

Hollow, 50 ft. deep, course SW.

Abrupt ascent.

27.50

Spur, projects S.

Abrupt descent.

29.50

Hollow, 75 ft. deep, course S.

Abrupt ascent.

31.00

Spur, projects S.

Descend.

33.50

Hollow, 50 ft. deep, course S.

CHAINS

Abrupt ascent.

39.95 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 9 on N. half, S 16 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable. ✓

41.75 Ridge, bears NE. and SW.

Abrupt descent.

42.50 Enter scattering timber.

69.00 Leave timber and rocky land.

74.00 Enter level land, bears NE. and SW.

Through sparse undergrowth.

79.90 The cor. of secs. 8-9-16 and 17.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 74.00 chs.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, greasewood and sage brush.

Mountainous land on 74.00 chs.

November 1: At this cor. I set off $14^{\circ}19'S.$ on decl. arc, and at 11h. 44m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}16'N.$

N. $0^{\circ}03'W.$, bet. secs. 8 and 9.

Over level land, through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 8 on W. half, S 9 on E. half, dig pits, 18x18x12 ins., N. and S. of post 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft., high, W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked on brass cap,

T 18 S S 5 in NW.,

R 10 E S 4 in NE.,

S 9 in SE. and S 8 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

CHAINS

Land, level.
 Soil, loam, 1st. rate.
 No timber.
 Undergrowth, greasewood, shad scale and sage brush.

East, on a random line, bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.88 Intersect N. and S. line, 2 lks. S. of the cor. of secs.
 3-4-9 and 10.

Thence I run

S. $89^{\circ}59'W.$, on a true line,

Bet. secs. 4 and 9.

Ascend abruptly over rocky and mountainous land.

0.90 Rocky ridge, bears N. and S.

Descend.

2.25 Enter scattering timber.

11.50 Leave rocky and mountainous land and timber, bearing
 NE. and SW. Over level land, through sparse undergrowth.

21.00 Wood road bears N. and S.

39.94 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 4 on N.
 half, S 9 on S. half, dig pits, 18x18x12 ins., E. and W. of post
 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
 high, N. of cor. ✓

79.88 The cor. of secs. 4-5-8 and 9.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 11.50 chs.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, greasewood, shad scale and sage brush.

Mountainous land on 11.50 chs.

N. $0^{\circ}03'W.$, on a random line, bet. secs. 4 and 5.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

85.24 Intersect N. bdy. of Tp., 14 lks. E. of the cor. of secs.

CHAINS

4-5-32 and 33, heretofore described.

Thence I run

S.0°09'E., on a true line,

Bet. secs. 4 and 5.

Over rolling land, through sparse undergrowth.

30.50

Wood road, bears NW. and SE.

45.24

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 5 on W. half, S 4 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

71.80

Wood road, bears NE. and SW.

85.24

The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, loam, 1st. and 2nd. rate.

No timber.

Undergrowth, greasewood, shad scale and sage brush.

November 1, 1910

November 2: At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $14^{\circ}33'S.$, on decl. arc, and determine a meridian with the solar at the re-established cor. of secs.

5-6-31 and 32, heretofore described on the S. bdy. of the Tp., Thence I run

N.0°03'W., bet. secs. 31 and 32.

Descend over rocky and mountainous land, through scattering timber.

5.00

Hollow, 50 ft. deep, course NW.

Ascend.

5.75

Rocky spur, projects W.

Descend.

6.50

Hollow, 50 ft. deep, course W.

Ascend.

9.00

Rocky spur, projects W.

Descend.

40.00

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

CHAINS

ground, for $\frac{1}{4}$ sec.cor., marked on brass cap, $\frac{1}{4}$ S 31 on W.
half, S 32 on E.half, from which

A cedar, 11 ins.diam., bears S.39°E., 76 lks.dist.,
marked $\frac{1}{4}$ S 32 BT.

A cedar, 9 ins.diam., bears S.73°W., 200 lks.dist.,
marked $\frac{1}{4}$ S 31 BT.

45.00 Rocky wash, 100 lks.wide, 25 ft.deep, course NW.

70.00 Rocky wash, 100 lks.wide, 30 ft.deep, course NW.

79.60 Leave timber.

80.00 Set an iron post, 3 ft.long, 2 ins.dia., 24 ins.in the
ground, for cor.of secs.29-30-31 and 32, marked on brass
cap, T 18 S S 30 in NW.,

R 10 E S 29 in NE.,

S 32 in SE.and S 31 in SW.quadrant, from which

A cedar, 9 ins.diam., bears N.33°E., 189 lks.dist.
marked T 18 S R 10 E S 29 BT.

A cedar, 12 ins.diam., bears S.18°E., 97 lks.dist.
marked T 18 S R 10 E S 32 BT.

A cedar, 14 ins.diam., bears S.4°W., 70 lks.dist.,
marked T 18 S R 10 E S 31 BT.

A cedar, 10 ins.diam., bears N.64°30'W., 123 lks.
dist., marked T 18 S R 10 E S 30 BT.

Land, mountainous.

Soil, rocky, 3rd.and 4th.rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

East, on a random line, bet.secs.29 and 32.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.02 Intersect N.and S.line, 12 lks.S.of the cor.of secs.
28-29-32 and 33.

Thence I run

S.89°55'W., on a trueline,

Bet.secs.29 and 32.

Over level land, in bottom of Buckhorn Draw, through sparse
undergrowth.

CHAINS

- 9.00 Wash, 25 lks. wide, 6 ft. deep, course S.
- 19.00 Begin abrupt ascent over broken ledges and boulders, through scattering timber.
- 31.00 Ridge, bears NE. and SW.
Enter heavy timber, bears NE. and SW.
Descend.
- 40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 29 on N. half, S 32 on S. half, from which
A cedar, 6 ins. diam., bears N. 7° W., 56 lks. dist., marked $\frac{1}{4}$ S 29 BT.
A cedar, 8 ins. diam., bears S. 71° 30' W., 48 lks. dist., marked $\frac{1}{4}$ S 32 BT.
- 56.00 Leave timber, bears NE. and SW.
- 70.00 Enter scattering timber.
- 77.00 Leave timber.
- 80.02 The cor. of secs. 29-30-31 and 32.
Land, mountainous, rolling and level.
Soil, loam, 1st. rate on 19.00 chs.
balance, rocky, 3rd. and 4th. rates.
Timber, cedar and pinon.
Mountainous land or heavily timbered on 37.00 chs.
- Knowing from the retracement of the W. bdy., that the line bet. secs. 30 and 31 will not close within limits on the W. bdy. of the Tp., I run
West, on a true line, bet. secs. 30 and 31.
Descend over rocky and mountainous land.
- 2.25 Hollow, 75 ft. deep, course SW.
Ascend over broken land.
- 30.00 Ridge, bears NE. and SW.
Descend.
- 36.00 Hollow, 50 ft. deep, course N.
Ascend.
- 39.00 Spur, projects N.
Descend.

CHAINS

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on N. half, S 31 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

62.00 Hollow, 75 ft. deep, course SW.

Ascend.

80.92 Intersect E. bdy. of T.18 S., R.9 E., 65 lks. N. $0^{\circ}18'W.$, from the cor. of secs. 25-30-31 and 36, heretofore described.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 30 and 31, marked on brass cap, T 18 S on N. half,

R 9 E S 25 S 36 CC on W. half, and

R 10 E S 30 S 31 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.

Pits impracticable. ✓

I destroy all marks on the cor. of secs. 25-30-31 and 36, that pertain to R.10 E.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.92 chs.

November 2: At this cor. I set off $14^{\circ}38'S.$ on decl. arc, and at 11h.44 m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}13'N.$

N. $0^{\circ}03'W.$, bet. secs. 29 and 30.

Descend over rocky and mountainous land.

8.00 Hollow, 75 ft. deep, course SW.

Ascend.

20.00 Enter scattering timber.

28.00 Leave timber.

32.50 Spur, projects SE.

Descend.

30.00 Hollow, 50 ft. deep, course E.

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS

- Ascend.
- 36.00 Spur, projects NE.
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on W. half, S 29 on E. half, and raise a mound of stone, 2 ft. base, on $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 46.50 Hollow, 75 ft. deep, course E.
Ascend.
- 56.00 Spur, projects E.
Descend.
- 62.00 Hollow, 75 ft. ^{deep} course E.
Abrupt ascent.
- 70.00 Rocky ridge, bears NE, and SW.
Abrupt descent.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked on brass cap, T 18 S S 19 in NW.,
R 10 E S 20 in NE.,
S 29 in SE. and S 30 in SW. quadrant, from which
A cedar, 5 ins. diam., bears S. 44° 30' W., 143 lks.
dist., marked T 18 S R 10, E S 30 BT.
No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
Land, mountainous.
Soil, rocky, 3 rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 80.00 chs.
-
- 40.00 N. 89° 55' E., on a random line, bet. secs. 20 and 29.
Set temp. $\frac{1}{4}$ sec. cor.
- 80.04 Intersect N. and S. line, 14 lks. N. of the cor. of secs. 20-21-28 and 29.
Thence I run

CHAINS	
	<p style="text-align: center;">✓</p> <p>N.89°59'W.,on a true line,bet.secs.20 and 29.</p> <p>Descend over rocky and mountainous land,through scattering timber.</p>
23.25	<p>Leave rocky land and timber,bears NE.and SW.</p> <p>Over level land,through sparse undergrowth.</p>
40.02	<p>Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap,$\frac{1}{2}$ S 20 on N. half,S 29 on S.half,dig pits,18x18x12 ins.,E.and W.of post,3 ft.dist.,and raise a mound of earth,$3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,N.of cor. ✓</p>
50.00	<p>Begin ascent over rocky and mountainous land,bears NW.and SE.</p>
67.50	<p>Spur,projects N.</p> <p>Descend.</p>
69.00	<p>Hollow,50 ft.deep,course NE.</p> <p>Ascend.</p>
71.50	<p>Spur,projects N.</p> <p>Descend.</p>
76.00	<p>Hollow,50 ft.deep,course N.</p> <p>Ascend.</p>
78.00	<p>Spur,projects N.</p> <p>Descend.</p>
80.04	<p>The cor.of secs.19-20-29 and 30.</p> <p>Land,mountainous and level.</p> <p>Soil,rocky,3rd.and 4th.rate on 53.29 chs.</p> <p style="padding-left: 40px;">balance,loam,1st.rate.</p> <p>Timber,cedar and pinon.</p> <p>Mountainous land on 53.29 chs. ✓</p> <hr style="width: 20%; margin: 10px auto;"/> <p>West,on a random line,,bet.secs.19 and 30.</p>
40.00	<p>Set temp.$\frac{1}{4}$ sec.cor.</p>
80.81	<p>Intersect W.bdy.of Tp.,9 lks.S.of the cor.of secs. 19-24-25 and 30,heretofore described.</p> <p>Thence I run</p> <p style="text-align: center;">✓</p> <p>S.89°56'E.,on a true line,</p>

CHAINS

Bet. secs. 19 and 30.

Ascend over rocky and mountainous land, through scattering timber.

6.00

Rocky ridge, bears N. and S.

Leave timber.

Abrupt descent over broken ledges.

24.00

Hollow, 100 ft. deep, course NW.

Ascend.

37.00

Spur, projects SW.

Descend.

40.00

Same hollow, 50 ft. deep, course SW.

Ascend over broken land.

40.81

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19 on N. half, S 30 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

69.60

Ridge, bears N. and S.

Descend.

74.75

Hollow, 50 ft. deep, course NE.

Ascend.

78.00

Spur, projects N.

Descend.

80.10

Hollow, 75 ft. deep, course N.

Abrupt ascent.

80.81

The cor. of secs. 19-20-29 and 30.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.81 chs.

N. 0° 03' W., bet. secs. 19 and 20.

Descend over rocky and mountainous land.

20.00

Hollow, 75 ft. deep, course E.

Ascend.

CHAINS

- 30.25 Spur, projects SE.
Descend.
- 33.50 Hollow, 50 ft. deep, course SE.
Ascend.
- 36.75 Spur, projects NE.
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19 on W. half, S 20 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 47.00 Hollow, 50 ft. deep, course E.
Ascend.
- 61.50 Ridge, bears NE. and SW.
Descend.
- 71.50 Hollow, 50 ft. deep, course NW.
Ascend.
- 74.50 Spur, projects NW.
Descend.
- 78.00 Enter timber, scattering.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked on brass cap, T 18 S S 18 in NW.,
R 10 E S 17 in NE.,
S 20 in SE. and S 19 in SW. quadrant, from which
A cedar, 6 ins. diam., bears N. 85° E., 245 lks. dist., marked T 18 S R 10 E S 17 BT.
A cedar, 4 ins. diam., bears S. 19° E., 224 lks. dist., marked T 18 S R 10 E S 20 BT.
A cedar, 5 ins. diam., bears S. 32° W., 154 lks. dist., marked T 18 S R 10 E S 19 BT.
- No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
Land, mountainous.

CHAINS

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

November 2, 1910

November 3: At 7h. 44m., a.m., 1.m.t., I set off $39^{\circ}15'N.$ on lat. arc, $14^{\circ}52'S.$ on decl. arc, and determine a meridian with the solar at the cor. of secs. 17-18-19 and 20.

Thence I run

$S. 89^{\circ}59'E.$, on a random line, bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line, 3 lks. N. of the cor. of secs.

16-17-20 and 21.

Thence I run

$N. 89^{\circ}58'W.$, on a trueline,

Bet. secs. 17 and 20.

Over level land, through sparse undergrowth.

2.30 Wash, 20 lks. wide, 8 ft. deep, course S.

6.25 Road from Green River to Huntington, bears NW. and SE.

30.00 Begin abrupt ascent over rocky and mountainous land, bears NE. and SW.

40.00 On top of rocky ridge, bears NE. and SW.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 17 on N. half, S 20 on S. half, from which

A pinon, 7 ins. diam., bears $S. 34^{\circ}W.$, 90 lks. dist., marked $\frac{1}{4}$ S 20 BT.

A pinon, 4 ins. diam., bears $N. 63^{\circ}W.$, 154 lks. dist., marked $\frac{1}{4}$ S 17 BT.

Enter heavy timber, bears NE. and SW.

Descend over rocky land.

77.50 Leave timber, bears N. and S.

80.00 The cor. of secs. 17-18-19 and 20.

Land, level and mountainous.

Soil, loam, 1st. rate on 30.00 chs.

balance, rocky, 3rd. and 4th. rate.

CHAINS

Timber, cedar and pinon.

Undergrowth, greasewood and sage brush.

Mountainous land on 50.00 chs.

Knowing from the retracement of the W.bdy. of the Tp., that the line bet. secs. 18 and 19 will not close within limits on the W.bdy., I run

N. 89°56' W., on a true line, bet. secs. 18 and 19.

Descend over rolling land, through sparse undergrowth.

6.50 Enter level land, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 18 on N. half, S 19 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓

46.00 Wood road, bears NE. and SW.

51.00 Wash, 8 lks. wide, 3 ft. deep, course SW.

81.20 Intersect E. bdy. of T. 18 S., R. 9 E., 82 lks. S. 0°12' E., from the cor. of secs. 13-18-19 and 24, heretofore described.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 18 and 19, marked on brass cap, T 18 S on N. half,

R 9 E S 13 S 24 CC on W. half; and

R 10 E S 18 S 19 on E. half, dig pits, 24x18x12 ins., crosswise on each line, N. and S., 3 ft. and E. of post, 7 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, E. of cor. ✓

I destroy all marks on the cor. of secs. 13-18-19 and 24, that pertain to R. 10 E.

Land, rolling and level.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood, shad scale and sage brush.

SUBDIVISIONS OF T.18 S.,R.10 E.

CHAINS

N.0°03'W.,bet.secs.17 and 18.

Descend over rocky and rolling land,through sparse undergrowth.

7.50 Hollow,30 ft.deep,course W.

Ascend.

11.50 Rocky spur,projects SW.

Descend.

15.00 Hollow,40 ft.deep,course SW.

Ascend.

19.25 Rocky spur,projects W.

Descend.

25.00 Enter level land,bears NE.and SW.

34.00 Wood road bears NE.and SW.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 18 on W. half,S 17 on E.half,dig pits,18x18x12 ins.,N.and S.of post,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high,W.of cor.

62.00 Begin ascend over rolling land,bears NE.and SW.

75.50 Low ridge,bears E.and W.

Descend.

80.00 Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.7-8-17 and 18,marked on brass cap,

T 18 S S 7 in NW.,

R 10 E S 8 in NE.,

S 17 in SE.and S 18 in SW.quadrant,and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.

Pits impracticable. ✓

Land,rolling and level.

Soil,rocky and sandy loam,1st.and 2nd.rate.

No timber.

Undergrowth,greasewood,shad scale and sage brush.

CHAINS	
	S.89°58'E., on a random line, bet. secs. 8 and 17.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line, 9 lks. S. of the cor. of secs. 8-9-16 and 17.
	Thence I run
	S.89°58'W., on a true line, bet. secs. 8 and 17.
	Over level land, through sparse undergrowth.
40.01	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 8 on N. half, S 17 on S. half, dig pits, 18x18x12 ins., E. and W. of post, ^{3 ft. dist.} and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
57.00	Begin ascent over rolling land, bears NW. and S.
66.89	Road from Green River to Huntington, bears NW. and SE.
80.02	The cor. of secs. 7-8-17 and 18.
	Land, level and mountainous.
	Soil, loam, 1st. and 2nd. rate.
	No timber.
	Undergrowth, greasewood, shad scale and sage brush.
	Knowing the line bet. secs. 7 and 18 will not close within limits on the W. bdy. of the Tp., I run
	N.89°56'W., on a true line, bet. secs. 7 and 18.
	Ascend over rolling land, through sparse undergrowth.
12.00	Low ridge, bears NW. and SE.
	Descend.
18.00	Enter level land, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 7 on N. half, S 18 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
73.00	Ascend over rolling land, bears NE. and SW.
81.27	Intersect E. bdy. of T.18 S., R.9 E., 2.08 chs., S.0°09'E., of the cor. of secs. 7-12-13 and 18, heretofore described.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

CHAINS

ground, for closing cor. of secs. 7 and 18, marked on brass cap, T 18 S on N. half, CC on W. half;
 R 9 E S 12 in NW.,
 R 10 E S 7 in NE.,
 S 18 in SE. and S 13 in SW. quadrant, dig pits, 24x18x12 ins. crosswise on each line, N. and S. 3 ft. and E. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

I destroy all marks on the cor. of secs. 7-12-13 and 18, that pertain to R. 10 E.

Land, rolling.

Soil, loam, 1st. and 2nd. rate.

No timber.

Undergrowth, greasewood, shad scale and sage brush.

November 3: At this cor. I set off $14^{\circ}57'S$ on decl. arc, and at 11h. 44m., a.m., i.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}16'N$.

N. $0^{\circ}03'W$, bet. secs. 7 and 8.

Descend over rolling land, through sparse undergrowth.

8.00 Road, from Green River to Huntington, bears NW. and SE.

Enter level land, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 7 on W. half, S 8 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked on brass cap, T 18 S S 6 in NW.,

R 10 E S 5 in NE.,

S 8 in SE. and S 7 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, rolling and level.

Soil, loam, 1st. and 2nd. rate.

CHAINS

No timber.
Undergrowth,greasewood,shad scale and sage brush.

N.89°58'E.,on a random line,bet.secs.5 and 8.

40.00 Set temp.¼ sec.cor.

80.00 Intersect N.and S.line,3 lks.N.of the cor.of secs.
4-5-8 and 9.

Thence I run

S.89°59'W.,on a true line,

Bet.secs.5 and 8.

Over level land,through sparse undergrowth.

17.00 Begin abrupt ascent over rocky land,bears N.and S.

20.00 Top of knoll,on line,75 ft.high.

Abrupt descent.

30.00 Foot of knoll,bears N.and S. Over level land.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
ground,for ¼ sec.cor.,marked on brass cap,¼ S 5 on N.
half,S 8 on S.half,dig pits,18x18x12 ins.,E.and W.of
post,3 ft.dist.,and raise a mound of earth,3½ ft.base,
1½ ft.high,N.of cor.

80.00 The cor.of secs.5-6-7 and 8.

Land,level and mountainous.

Soil,loam,1st.rate on 67.00 chs.

balance,rocky,3rd.rate.

No timber.

Undergrowth,greasewood,shad scale and sage brush.

Mountainous land on 13.00 chs.

Knowing the line bet.secs.6 and 7 will not close within
limits on the W.bdy.of the Tp.,I run

N.89°56'W.,on a true line,bet.secs.6 and 7.

Over level land,through sparse undergrowth.

12.10 Wood road,bears N.and S.

29.00 Wood road,bears N.and S.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
ground,for ¼ sec.cor.,marked on brass cap,¼ S 6 on N.

SUBDIVISIONS OF T.18 S., R.10 E.

CHAINS

half, S 7 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

81.44 Intersect W. bdy. of Tp., 2.75 chs., S. $0^{\circ}03'W.$ from the re-established cor. of secs. 1-6-7 and 12, heretofore described.

Set an iron post, 3 ft. long, 2 ins. dia., in mound of earth for closing cor. of secs. 6 and 7, marked on brass cap

T 18 S on N. half,

R 9 E S 1 S 12 CC on W. half,

R 10 E S 6 S 7 on E. half, dig pits, 24x18x12 ins.,

crosswise on each line, N. and S., 3 ft., and E. of post, 7 ft.

dist., and raise a mound of earth, 4 ft. base, 2 ft. high,

E. of cor.

Note:

On account natural obstacles it is impossible to set this post over 15 ins. in the ground.

I destroy all marks on the cor. of secs. 1-6-7 and 12, that pertain to R. 10 E.

Land, level.

Soil, loam, 1st. and 2nd. rate.

No timber.

Undergrowth, greasewood, shad scale and sage brush.

Knowing from the retracement of the N. bdy. that the line bet. secs. 5 and 6 will not close within limits on the N. bdy., I run

N. $0^{\circ}03'W.$, on a true line, bet. secs. 5 and 6.

Gradual ascent over rolling land, through sparse undergrowth.

2.08 Wood road, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 6 on W. half, S 5 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

TRACTS

22.18 Wood road, bears E. and W.

71.03 Wood road, bears E. and W.

24.00 Intersect S. 34y. of T.17 S., R.10 E., 1.00 ch., N. 89°42'E., from the cor. of secs. 5-6-31 and 32, heretofore described. Set an iron post, 5 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 5 and 6, marked on brass cap, T 17 S R 10 E S 31 S 32 CC on N. half, and T 18 S R 10 E S 5 S 6 on S. half, dig pits, 24x18x18 ins., crosswise on each line, E. and W., 5 ft. and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

I destroy all marks on the cor. of secs. 5-6-31 and 32, that pertain to T.18 S.

Land, rolling.

Soil, loam, 2nd. rate.

No timber.

Undergrowth, greasewood, shad scale and sage brush.

November 3, 1910

GENERAL DESCRIPTION.

This township falls on the northwest slope and foot hills of the Cedar Mountain and the soil on the mountainous portion is generally solid conglomerate or solid ledge with a thin covering of soil, and covered with a heavy or scattering growth of cedar and pinon timber. The only portion not mountainous is the northwest portion the soil of which is loam, with a subsoil of shale generally about 15 ins. below the surface and is covered with a sparse growth of greasewood, shad scale and sage brush.

Crops could be raised upon this portion with irrigation. The only portion of the township where cultivation would be practicable is along the bottom of Buckhorn Run, which in a wide channel, cutting through the Cedar Mountain, in a south eastern direction, the soil of which

GENERAL DESCRIPTION OF T.18 S.,R.10 E.

is a rich loam, capable of producing excellent crops with irrigation, the water for which can be obtained from the Buckhorn Reservoir, which is situated at the head of Buckhorn Draw, in the E $\frac{1}{2}$ of sec. 20, area of reservoir at time of survey, about 90 acres.

This water is stored from the surface water which falls upon the northern half of the township, all of which drains to this point.

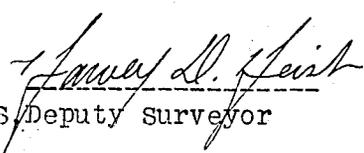
There is no other water in this township.

There are no settlers in this township, there are indications of cultivation in the bottom of Buckhorn Draw, this

was attempted several years ago.

The reservoir is owned by an irrigation company, the name of which I have been unable to ascertain.

There are no indications of oil, coal or minerals found in this township.


U. S. Deputy Surveyor

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____ giving the respective capacities in which they acted:

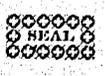
- _____, Chainman.
_____ list of names and final oath of assistants see book "K", Chainman.
T. 19 S., R. 11 E., Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all parts or portions of the _____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the monuments established, according to the instructions furnished by the United States Surveyor General for _____

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

Subscribed and sworn to before me this _____ day of _____, 19 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date _____ day of _____, 19____, I have well, faithfully, and truly, in _____ proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of deputy see book "K" T. 19 S., R. 11 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1912.

The foregoing field notes of the survey of _____ the subdivisioinal lines of Towns No. 18 South, Range No. 10 East of the Salt Lake Base and Meridian _____ Utah, _____

executed by _____ Harvey D. Heist and Walter A. Stumm
under ^{their} contract No. 320, dated _____ May 3, _____ 1910, having critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

[Handwritten Signature]
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-369

et.

FIELD NOTES

RE TRACEMENT
OF THE ~~SURVEY~~ OF THE

N. O. R. T. H. B. O. U. N. D. A. R. Y

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 9 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist, and Walter A. Stumm, United States Deputy Surveyors

their

Survey Contract No. 320, dated May 3, 1910

Tracement

Survey commenced November 4, 1910

Tracement

Survey completed November 5, 1910

30134

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chainman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

For preliminary affidavits see book "A" T. 18 S., R. 10 E.

BOOK A-369

INDEX DIAGRAM.

Township 19 South, , Range 9 East,
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29	28	29	27	26	25
31	32	33	34	35	36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist in setting, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____, Chainman

_____, Chainman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

_____, Moundman

_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

_____, Axman

_____, Axman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



RETRACEMENT OF THE NORTH BOUNDARY OF T.19 S.,R.9 E.

CHAINS

Survey commenced November 4, 1910, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the re-established cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., heretofore described in approximate lat. $39^{\circ}12'N.$, longitude $110^{\circ}54'W.$, I set off $39^{\circ}12'N.$ on lat. arc, $15^{\circ}17'S.$ on decl. arc, and at 3h. 44m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

November 4, 1910

November 5: At 4h. 30m., a.m., l.m.t., I observe Polaris at western elongation in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $15^{\circ}30'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively, about $0'11''$ west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m., a.m., is $N.16^{\circ}45'W.$, the angle thus determined gives the mag. decl. $16^{\circ}45'E.$

CHAINS

From the Tp.cor.already described I run

West, retracing bet. secs. 1 and 36.

40.43 Intersect the $\frac{1}{4}$ sec.cor., heretofore described.

I continue west.

40.00 Fall 30 lks.N.of the cor.of secs.1-2-35 and 36, which is a sandstone, 10x10x5 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°36'W., and the distance, 40.00 chs.

West, retracing bet. secs. 2 and 35.

40.00 Fall 9 lks.N.of the $\frac{1}{4}$ sec.cor., which is a sandstone, 15x10x9 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°52'W., and the distance 40.00 chs.

I offset over the $\frac{1}{4}$ sec.cor.and continue west.

40.48 Fall 34 lks.N.of the cor.of secs.2-3-34 and 35, which is a sandstone, 10x12x3 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°31'W., and the distance, 40.48 chs.

West, retracing bet. secs. 3 and 34.

40.36 Fall 18 lks.N.of the $\frac{1}{4}$ sec.cor., which is a sandstone, 8x10x3 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°45'W., and the distance 40.36 chs.

I offset over the $\frac{1}{4}$ sec.cor.and continue west

40.07 Fall 10 lks.N.of the cor.of secs.3-4-33 and 34, which is sandstone, 7x7x5 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89°52'W., and the distance 40.07 chs.

CHAINS

For General Description, see Subdivisions of T.19 S.,
R 9 E.

For table of latitude and departures, see South and East
boundaries of T.19 S.,R.9 E.

James M. Geist
U.S. Deputy Surveyor

Volume

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist, United States Deputy Surveyor, to assist in running, measuring, and retracement making the lines and corners described in the foregoing field notes of the survey of the N. & W. bdy. of T. 8 S., R. 10 E., and the N. bdy. of T. 19 S., R. 9 E., S. L. B. & M., in the state of Utah, showing the respective capacities in which they acted:

- Nathan K. Knight, Chairman.
Rodney B. Shelley, Chairman.
Jacob E. Minchey, Moundman.
Olef C. Jensen, Axman.
Melvin D. Heist, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in retracing these parts or portions of the N. & W. bdy. of T. 18 S., R. 10 E., and the N. bdy. of T. 19 S., R. 9 E.

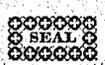
of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

- Nathan K. Knight, Chairman.
Rodney B. Shelley, Chairman.
Jacob E. Minchey, Moundman.
Olef C. Jensen, Axman.
Melvin D. Heist, Flagman.

Subscribed and sworn to before me this 5th day of November, 1900

Harvey D. Heist

U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor
solemnly swear that, in pursuance of a contract received from Thomas Hull,
United States Surveyor General for Utah, bearing date of
3rd. day of May, 1910, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for Utah, the Manual of Surveying Instructions, and the laws of
United States, ~~surveyed~~ ^{retraced} all those parts or portions of the W. & N. bdy. of T. 18 S., R. 1
E. and the N. bdy. of T. 19 S., R. 9 E.,

of the Salt Lake Base
and and meridian, in the state of Utah, which are represented in
in books "A" and "D"
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance
with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such ~~survey~~ ^{retracement}.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me
this 11 day of January, 1911~~10~~

Thomas Hull
U.S. Surveyor-General



APPROVAL. for Utah.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1911~~10~~

The foregoing field notes of the ~~survey~~ ^{retracement} of the North Boundary of
Township No. 19 South, Range No. 9 East of the Salt Lake Base and Meridian,
Utah,

executed by Harvey D. Heist and Walter A. Stumm
^{their} under his contract No. 320, dated May 3, 1910~~10~~, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and
~~surveys~~ ^{retracements} they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this office.

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grant changes

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BOOK A-369

FIELD NOTES

RETRACEMENT
OF THE SURVEY OF THE

S.U.B.D.I.V.I.S.I.O.N.S.

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 9 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors

their

under his Contract No. 320, dated May 3, 1910

retracement

survey commenced November 5, 1910

retracement

survey completed November 5, 1910

Patr. 4-02-48 ✓

Res. 20076 ✓

6-03-24 ✓

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chairman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

BOOK A-369

INDEX DIAGRAM.

Township 19 South, Range 9 East,

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

We, Nathan K. Knight, and Rodney B. Shelley,
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ^{retracemen} survey of
the subdivisions of T.19 S.R.9 E., S.L.B. & M., in the state of Utah.

Nathan K. Knight, Chainman.
Rodney B. Shelley, Chainman.

Subscribed and sworn to before me this 5th.
day of November, 1900



Fahey D. Feist
U.S. Deputy Surveyor

We, I. Jacob E. Minchey, and
do solemnly swear that we will well and truly perform the duties of moundman in the establishment
of corners, according to the instructions given ^{me} us, to the best of ^{my} skill and ability, in the ^{retracemen} survey of
the subdivisions of T.19 S., R.9 E., S.L.B. & M., in the state of Utah

Jacob E. Minchey, Moundman.
Moundman.

Subscribed and sworn to before me this 5th.
day of November, 1900



Fahey D. Feist
U.S. Deputy Surveyor

We, I. Olef C. Jensen, and
do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners
and other duties, according to instructions given ^{me} us, to the best of ^{my} skill and ability, in the ^{retracemen} survey of
the subdivisions of T.18 S., R.9 E., S.L.B. & M., in the state of Utah.

Olef C. Jensen, Axman.
Axman.

Subscribed and sworn to before me this 5th.
day of November, 1900



Fahey D. Feist
U.S. Deputy Surveyor

I, Melvin D. Heist, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
^{retracemen} of the subdivisions of T.19 S.R.9 E., S.L.B. & M., in the state
of Utah.

Melvin D. Heist, Flagman.

Subscribed and sworn to before me this 5th.
day of November, 1900



Fahey D. Feist
U.S. Deputy Surveyor

CHAINS

Survey commenced November 5, 1910, and executed with the instrument described in book "A", of this survey.

I know the instrument to be in adjustment from recent observations made November 4 and 5, 1910, at the cor. of Tps.18 and 19 S.,Rs.9 and 10 E., and described in book "D", of this survey.

I begin at the cor. of secs.3-4-33 and 34, heretofore described on the N.bdy. of the Tp., and run

S.0°09'E., retracing bet. secs.3 and 4.

24.25 Road, from Castledale to Green River, bears NE. and SW.

40.62 Fall 29 lks. W. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 10x12x3 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.0°34'E., and the distance 40.62 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue, S.0°09'E.

40.32 Intersect the cor. of secs.3-4-9 and 10, which is a trachyte stone, 10x10x10 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore, S.0°09'E., and the distance, 40.32 chs.

South, retracing bet. secs.9 and 10.

40.00 No trace can be found of the $\frac{1}{4}$ sec. cor.

I continue my line south and can find no trace of any cor. until at 160.76 chs., fall 75 lks. W. of the cor. of secs.15-16-21 and 22, which is a sandstone 16x15x4 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.0°16'E., and the proportionate measurement for each half mile is 40.19 chs.

November 5: At this cor. I set off 15°35'S. on a decl. arc, and at 11h.44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°10'N.

CHAINS

South, retracing bet. secs. 21 and 22.

41.06 Fall 35 lks. E. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 16x10x9 ins., firmly set in a mound of stone, marked and witnessed as described by the surveyor general. The course of this line is therefore S.0°29'W., and the distance 41.06 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue south

40.85 Fall 28 lks. W. of the witness cor. of secs. 21-22-27 and 28 which is set 25 lks. South of true point for cor. and is 5x12x5 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.0°24'E., and the distance to the witness cor. 40.85 chs.

From the witness cor. of secs. 21-22-27 and 28, I run South, retracing bet. secs. 27 and 28.

38.61 Fall 58 lks. W. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 10x12x6 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.0°52'E., and the distance from witness cor. to $\frac{1}{4}$ sec. cor., 38.61 chs.

I offset over the $\frac{1}{4}$ sec. cor. and continue, south

40.64 Fall 17 lks. W. of the cor. of secs. 27-28-33 and 34, which is a sandstone, 20x14x10 ins., firmly set in a mound of stone, marked and witnessed as described by the surveyor general.

The course of this line is therefore S.0°14'E., and the distance 40.64 chs.

RETRACEMENTS OF THE SUBDIVISIONS OF T.19 S., R.9 E.

CHAINS

South, retracing bet. secs. 33 and 34.

40.85 Fall 10 lks. W. of the $\frac{1}{4}$ sec. cor., which is a sandstone, 12x12x7 ins. above ground, marked and witnessed as described by the surveyor general.

I continue on same line.

80.38 Fall 20 lks. W. of the cor. of secs. 3-4-33 and 34, on the S. bdy. of the Tp., which is a sandstone, 12x10x4 ins. above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S. 0°09'E., and the distance 80.38 chs.

From the cor. of secs. 15-16-21 and 22, I run

N. 0°16'W., resurveying bet. secs. 15 and 16.

Ascent abruptly over rocky and mountainous land.

4.00 Rocky spur, projects SW.

Abrupt descent.

9.50 Hollow, 150 ft. deep, course SW.

Abrupt ascent.

20.50 Rocky ridge, bears NW. and SE.

Abrupt descent.

30.50 Hollow, 100 ft. deep, course NW.

Abrupt ascent.

36.00 Spur, projects NW.

Abrupt descent.

40.19 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{2}$ S 16 on W. half, S 15 on E. half, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

After diligent search no trace can be found of the old $\frac{1}{4}$ sec. cor.

47.00 Hollow, 100 ft. deep, course W.

Abrupt ascent.

60.00 Rocky spur, projects SW.

Descent.

CHAINS

- 66.50 Hollow, 75 ft. deep, course W.
Ascend.
- 71.00 Rocky spur, projects NW.
Abrupt descent.
- 80.38 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for re-established cor. of secs. 9-10-15 and 16, marked on brass cap, T 19 S S 9^v in NW.,
R 9 E S 10' in NE.,
S 15 in SE. and S 16 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
After diligent search, no trace can be found, of the old sec. cor.
Land, mountainous.
Soil, rocky, 3rd. and 4th. rate.
No timber.
Mountainous land on 80.38 chs.
-
- N. 0° 16' W., resurveying bet. secs. 9 and 10.
Descend over rocky and mountainous land.
- 1.50 Hollow, 100 ft. deep, course SW.
Ascend abruptly over broken and rocky land.
- 5.00 Rocky spur, projects SW.
Abrupt descent.
- 10.00 Hollow, 100 ft. deep, course SW.
Abrupt ascent.
- 22.00 Ridge, bears NE. and SW.
Abrupt descent over broken land.
- 40.19 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 9' on W. half, S 10' on E. half, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
After diligent search, no trace can be found of the old $\frac{1}{4}$ sec. cor.

RETRACEMENT OF THE SUBDIVISIONS OF T.19 S., R.9 E.

CHAINS

46.00 Hollow, 75 ft. deep, course SW.

Ascend.

61.50 Rocky spur, projects NE.

Descend.

80.38 The cor. of secs. 3-4-9 and 10.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.38 chs.

November 5, 1910

For General description see Subdivisions of T.19 S.,
R 9 E.

Lawrence D. Geist
U.S. Deputy Surveyor

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of retracement

Subdivisions of T. 19 S., R. 9 E., S. L. E. & M., in the state of Utah.

showing the respective capacities in which they acted:

Nathan K. Knight, Chainman.

Rodney B. Shelley, Chainman.

Jacob E. Minchey, Moundman.

Moundman.

Olef C. Jensen, Axman.

Axman.

Melvin D. Heist, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in retracing

those parts or portions of the Subdivisions of T. 19 S., R. 9 E.,

of the Salt Lake

Base and meridian, in the state of Utah,

which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey

has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the

corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Nathan K. Knight, Chainman.

Rodney B. Shelley, Chainman.

Jacob E. Minchey, Moundman.

Moundman.

Olef C. Jensen, Axman.

Axman.

Melvin D. Heist, Flagman.

described and sworn to before me this 5th.

day of November, 1920



Harvey D. Heist

U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

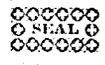
I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of 3rd day of May, 1910, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of United States, ~~surveyed~~ ^{retraced} all those parts or portions of the subdivisions of T. 19 S., R. 9 E.,

of the Salt Lake Base and meridian, in the state of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ~~survey~~ ^{retracement}.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me
this 11th day of January, 1911

Thomas Hull
U.S. Surveyor-General
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1912, 1912

The foregoing field notes of the survey of the retracement of the subdivisions of Township No. 19 South, Range No. 9 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Walter A. Sturm under ~~his~~ ^{their} contract No. 720, dated May 3, 1910, ~~1910~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and ~~surveys~~ ^{retracements} they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office

United States Surveyor General

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BOOK A-369

FIELD NOTES

N.C.

OF THE SURVEY OF THE

SOUTH and EAST BOUNDARIES

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 9 EAST,

Of the 1811 Lake Erie and Meridian,

in the state of Ohio

AS SURVEYED BY

Harvey E. Heist and Walter A. Blunn, United States Deputy Surveyors

Under

Contract No. 520, dated May 3, 1910

Survey commenced November 6, 1910

Survey completed November 7, 1910

*with 2775 ft
and 6620 ft
9 20 10*

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chainman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

BOOK A-369

INDEX DIAGRAM.

Township 19 south,, Range 9 East,

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31	32	33	34	35	36 5
			1	3	4

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Nathan K. Knight and Rodney B. Shelley,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

of the S. & E. bdys. of T. 19 S., Rs. 9 & 10 E., and the S. E. & N. bdys. of T. 19 S. R. S. L. B. & M., in the state of Utah.

Nathan K. Knight, Chainman
Rodney B. Shelley, Chainman

Subscribed and sworn to before me this 6th day of November, 1900



Faney D. Fish
U.S. Deputy Surveyor

We, I, Jacob E. Minchey, and

do solemnly swear that ^I~~we~~ will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ^{me}~~us~~, to the best of ^{my}~~our~~ skill and ability, in the survey

of the S. & E. bdys. of T. 19 S., Rs. 9 & 10 E., and the S. E. & N. bdys. of T. 19 S. R. S. L. B. & M., in the state of Utah.

Jacob E. Minchey, Moundman
Jacob E. Minchey, Moundman

Subscribed and sworn to before me this 6th day of November, 1900



Faney D. Fish
U.S. Deputy Surveyor

We, I, Olef C. Jensen, and

do solemnly swear that ^I~~we~~ will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ^{me}~~us~~, to the best of ^{my}~~our~~ skill and ability, in the survey

of the S. & E. bdys. of T. 19 S., Rs. 9 & 10 E. and the S. E. & N. bdys. of T. 19 S. R. S. L. B. & M., in the state of Utah

Olef C. Jensen, Axman
Olef C. Jensen, Axman

Subscribed and sworn to before me this 6th day of November, 1900



Faney D. Fish
U.S. Deputy Surveyor

I, Melvin D. Heist, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the

survey of the S. & E. bdys. of T. 19 S., Rs. 9 & 10 E., and the S. E. & N. bdys. of T. 19 S. R. S. L. B. & M., in the state of Utah.

Melvin D. Heist, Flagman

Subscribed and sworn to before me this 6th day of November, 1900



Faney D. Fish
U.S. Deputy Surveyor

CHAINS

Survey commenced, November 6, 1910, and executed with the instrument described in book "A", of this survey. I begin at the re-established cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., heretofore described.

I know from recent observations made at this same cor. November 4 and 5, 1910, and recorded in book "D" of this survey that the instrument is in adjustment.

At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}12'N.$ on lat. arc, $15^{\circ}48'S.$ on decl. arc, and determine a meridian with the solar.

Thence I run

South, on a random line, along the E. bdy. of T. 19 S., R. 9 E. setting temp. $\frac{1}{4}$ sec. and sec. cor. at intervals of 40.00 chs. and at 480.00 chs., set temp. cor. for Tps. 19 and 20 S. Rs. 9 and 10 E.

November 6: At this cor. I set off $15^{\circ}53'S.$ on decl. arc, and at 11h. 44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}07'N.$

From the temp. cor. of Tps. 19 and 20 S., Rs. 9 and 10 E., I run West, on a random line, along the S. bdy. of T. 19 S. R. 9 E., setting temp. $\frac{1}{4}$ sec. cor. and sec. cors. at intervals of 40.00 chs. and at 239.64 chs., fall 4.84 chs. N. of the cor. of secs. 3-4-33 and 34, heretofore described.

This line being out of limits I abandon my random line and begin at the cor. of secs. 3-4-33 and 34 on the S. bdy. of the Tp., run east on a true line, the proportionate length of each half mile will be 39.94 chs.

November 6, 1910

November 7: At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $16^{\circ}06'S.$ on decl. arc, and determine a meridian with the solar at the cor. of secs. 3-4-33 and 34, on the S. bdy. of the Tp.,

Thence I run

East, on a true line, bet. secs. 3 and 34.

CHAINS	
	Descend over mountainous land.
6.00	Wash, 100 lks. wide, 5 ft. deep, course NE.
15.50	Same wash, 100 lks. wide, 5 ft. deep, course SE. Begin ascent over rocky land.
18.00	Spur, projects S. Descend.
20.25	Hollow, 75 ft. deep, course SW. Ascend.
25.75	Spur, projects S. Descend.
28.00	Hollow, 50 ft. deep, course S. Ascend.
35.00	Spur, projects S. Abrupt descent over sandstone ledges.
38.00	Hollow, 100 ft. deep, course N. Abrupt ascent over sandstone ledges.
39.84	Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S $\frac{1}{34}$ on N. half, S $\frac{1}{3}$ on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Note: On account of natural obstacles it is impossible to set this post in the ground,
42.40	Sandstone spur, projects N. Abrupt descent over solid sandstone ledges.
46.00	Same hollow, 150 ft. deep, course SE. Abrupt ascent over sandstone ledges.
58.00	Spur, projects S. Abrupt descent over sandstone ledges.
62.50	Enter bottom of same hollow, 200 ft. deep, course E. Descend in sandy bottom.
79.88	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-34 and 35, marked on brass cap T 19 S S $\frac{1}{34}$ in NW., R 9 E S $\frac{1}{35}$ in NE.,

CHAINS

R 9 E S 2 in SE.
T 20 S S 3 in SW quadrant, and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No. timber.

Mountainous land on 79.88 chs.

East, bet. secs. 2. and 35.

Descend over mountainous land, in hollow, course E.

9.00 Leave hollow, course NE.

Ascend abruptly over sandstone ledges, bearing NE. and SW.

16.50 Sandstone spur, projects N.

Abrupt descent over sandstone ledges.

23.00 Foot of abrupt descent and south side of bend in same
hollow, course from NW. to NE.

Abrupt ascent over sandstone ledges bearing NE. and SW.

38.00 Sandstone spur, projects N.

Abrupt descent.

39.94 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on N.
half, S 2° on S. half, and raise a mound of stone, 2 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

63.00 Foot of abrupt descent and sandstone ledges, bears
NW. and SE.

Over level land, through dense undergrowth and scattering
timber.

66.25 San Rafael River, 75 lks. wide, 12 ins. deep, course SE.

79.88 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of secs. 1-2-35 and 36, marked on brass cap,

T 19 S S 35 in NW.,

R 9 E S 36 in NE.,

R 9 E S 1 in SE. and

T 20 S R 2 in SW quadrant, from which

CHAINS

A cotton wood,5 ins.diam.,bears N.10°E.,219 lks.
dist.,marked T 19 S R 9 E S 36 BT.

A cottonwood,5 ins.diam.,bears S.9°E.,82 lks.dist.
marked T 20 S R 9 E S 1 BT.

A cottonwood,6 ins.diam.,bears S.79°W.,101 lks.
dist.,marked T 20 S R 9 E S 2 BT.

A cottonwood,4 ins.diam.,bears N.63°W.,106 lks.
dist.,marked T 19 S R 9 E S 35 BT.

Land,mountainous and level.

Soil,rocky,3rd.and 4th.rate on 63.00 chs.

balance,bottom land,1st.rate.

Timber,cottonwood.

Undergrowth,greasewood and willows.

Mountainous land or land covered with dense undergrowth
on 79.88 chs.

East,bet.secs.1 and 36.

Over level bottom land,through dense undergrowth and
scattering timber.

3.75 San Rafael River,75 lks.wide,12 ins.deep,course NE.

20.75 Same river,75 lks.wide,12 ins.deep,course SE.

22.00 Leave bottom land,bears NW.and SE.

Ascend over broken gypsum hills.

39.50 Spur,projects S.

Descend over broken gypsum hills.

39.94 Set an iron post,3 ft.long,1 in.dia., 26 ins.in the
ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 36 on N.
half,S 1 on S.half, and raise a mound of stone,2 ft.
base, $1\frac{1}{2}$ ft.high,N.of cor.

Pits impracticable.

74.00 Hollow,75 ft.deep,course SW.

79.88 On top of spur,projects SW.

Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the
ground,for cor.of Tps.19 and 20 S.,Rs.9 and 10 E.,marked
on brass cap,T 19 S on N.half,
T 20 S on S.half,

SOUTH BOUNDARY OF T.19 S.,R.9 E.

CHAINS

R 9 E S 36 in NW.,
 R 10 E S 31 in NE.,
 R 10 E S 6 in SE.,and
 R 9 E S 1 in SW.quadrant,dig pits,24x24x12 ins.,on each
 line,N.,E.,and W.,4 ft. and S.of post,8.ft.dist.,and
 raise a mound of earth,5 ft.base,2½ ft.high,S.of cor.
 Land,level and mountainous.
 Soil,loam, 1st.rate on 22.00 chs.
 balance, gypsum, 3rd.rate.
 Timber, cottonwood.
 Undergrowth, greasewood and willows.
 Mountainous land or land covered with dense undergrowth
 on 79.88 chs.

EAST BOUNDARY OF T.19 S.,R.9 E.

From the cor.of Tps.19 and 20 S.,Rs.9 and 10 E.,I run
 North,bet.secs.31 and 36.

Descend over mountainous land.

6.00 Hollow, 75 ft.deep,course SW.

Abrupt ascent.

8.00 Top of abrupt ascent,bears NE.and SW.

Ascend over rolling land.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
 ground,for ¼ sec.cor.,marked on brass cap,¼ S 36 on W.
 half,S 31 on E.half,dig pits,18x18x12 ins.,N.and S.of
 post,3 ft.dist.,and raise a mound of earth,3½ ft.base,1
 ft.high,W.of cor.

69.00 Begin abrupt ascent over broken gypsum hills,bearing
 NE.and SW.

80.00 Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the
 ground,for cor.of secs.25-30-31 and 36,marked on brass
 cap,T 19 S on N.half,
 R 9 E S 25 in NW.,
 R 10 E S 30 in NE.,
 S 31 in SE.and S 36 in SW.quadrant,and raise a mound of

CHAINS

stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, mountainous and rolling.

Soil, gypsum and sandy 3rd. rate.

No timber.

Mountainous land on 19.00 chs.

November 7: At this cor. I set off $16^{\circ}11'S$. on decl. arc, and at 11h. 44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}08'N$.

North, bet. secs. 25 and 30.

Ascend abruptly over sandstone ledges, bearing NE. and SW.

7.50 Sandstone spur, projects E.

Descend abruptly over solid sandstone ledges, along steep east slope.

32.00 Hollow, 150 ft. deep, course E.

Abrupt ascent over solid sandstone ledges.

36.25 Top of sandstone ledges, bearing NE. and SW.

Ascend over rolling land, through sparse undergrowth.

40.00 On top of ridge, bears NE. and SW.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2} S 25$ on W. half, $S 30$ on E. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Descend.

69.00 Hollow, 50 ft. deep, course W.

Ascend.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked on brass cap, $T 19 S$ on N. half,

$R 9 E S 24$ in NW.,

$R 10 E S 19$ in NE.,

$S 30$ in SE. and $S 25$ in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

CHAINS

Pits impracticable.

Land, mountainous and rolling.

Soil, rocky, 4th. rate on 36.25 chs.

balance, sandy loam, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 36.25 chs.

North, bet. secs. 19 and 24.

Gradual ascent over rolling land, through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 24 on W. half, S 19 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Descend.

57.00 Hollow, 75 ft. deep, course SW. Ascend.

60.00 Begin abrupt ascent over broken and rocky land, bears E. and W.

66.00 Rocky spur, projects SW.

Descend.

70.00 Hollow, 50 ft. deep, course SW.

Ascend.

79.75 Ridge, bears NE. and SW.

Descend.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 13-18-19 and 24, marked on brass cap, T 19 S on N. half,

R 9 E S 13 in NW.,

R 10 E S 18 in NE.,

S 19 in SE. and S 24 on SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, rolling and mountainous.

Soil, sandy loam, 2nd. rate on 60.00 chs.

balance, rocky, 3rd. rate.

CHAINS

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 20.00 chs.

North, bet. secs. 13 and 18.

Descend over rocky and mountainous land.

- 0.75 Hollow, 75 ft. deep, course NW.
Abrupt ascent.
- 3.00 Rocky spur, projects SW.
Descend.
- 6.50 Hollow, 50 ft. deep, course SW.
Ascend.
- 11.00 Spur, projects SW.
Descend over rolling land, through sparse undergrowth.
- 28.00 Hollow, 40 ft. deep, course SW.
Ascend.
- 32.00 Spur, projects SW.
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on W. half, S 18 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 56.75 Top of rocky knoll, 40 ft. high, on line.
- 58.00 Begin descent in bottom of rocky hollow, course N.
- 79.60 Leave rocky, hollow, course NE.
Ascend.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 7-12-13 and 18, marked on brass cap, T 19 S on N. half,
R 9 E S 12 in NW.,
R 10 E S 7 in NE.,
S 18 in SE. and S 13 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

CHAINS

Pits impracticable.

Land, mountainous and rolling

Soil rocky, 3rd. rate.

No timber.

Mountainous land on 11.00 chs.

North, bet. secs. 7 and 12.

Ascend over rocky land; through sparse undergrowth.

3.00 Spur, projects NE.

Descend.

9.00 Hollow, 50 ft. deep, course NW.

Ascend.

20.10 Top of rocky knoll, 25 ft. high, on line.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 12 on W. half, S 7 on E. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

53.00 Hollow, 50 ft. deep, course W.

Ascend.

58.00 Begin abrupt ascent over nearly perpendicular sandstone ledges, bearing NW. and SE.

60.00 Top of ledges, 75 ft. high, bearing NW. and SE.

Descend.

73.00 Hollow, 50 ft. deep, course W.

Ascend.

75.00 Ridge, bears NE. and SW.

Descend.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone and earth, for cor. of secs. 1-6-7 and 12, marked on brass cap, T 19 S on N. half,

R 9 E S 1 in NW.,

R 10 E S 6 in NE.,

S 7 in SE. and S 12 in SW. quadrant, and raise a mound of

stone, 2 ft. base, 1 1/2 ft. high, 1/2 ft. dia.

Not identifiable.
This specimen is set over 1/2 in. in the ground.
No soil, no roots, and no water.

11.1.1. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia.

Not identifiable.

11.1.2. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia.

Not identifiable. Found on 11.10.11.

11.1.3. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia.

11.1.3.1. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.2. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.3. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.4. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.5. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.6. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.7. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.8. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.
This specimen is set over 1/2 in. in the ground, and is marked on a brass cap, 1/2 in. dia. on 11.10.11.
No soil, no roots, and no water. Found on 11.10.11.

11.1.3.9. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.10. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.11. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.12. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.13. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.14. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.15. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.16. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.17. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.18. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.19. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.20. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.21. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

11.1.3.22. 1/2 ft. base, 1 1/2 ft. high, 1/2 ft. dia. Found on 11.10.11.

CHAINS

82.50 Enter hollow, course SW. from N.

Ascend along east edge of bottom of hollow.

84.84 The cor. of Tps. 18 and 19 S., Rs. 9 and 10 E., heretofore described.

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 50.84 chs.

November 7, 1910

Note:

I destroyed all the old corners along the north
3 miles of the E. bdy., which were set on a previous
survey .

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
S.Bdy.	East	239.64✓			239.64✓	
E.Bdy.	North	484.84✓	484.84✓			
N.Bdy.	West,	40.43✓				40.43✓
	S.89°36'W.	40.00✓		0.29✓		40.00✓
	S.89°52'W.	40.00✓		0.09✓		40.00✓
	S.89°31'W.	40.48✓		0.34✓		40.48✓
	S.89°45'W.	40.36✓		0.18✓		40.36✓
	S.89°52'W.	40.07✓		0.09✓		40.07✓
Subdivisions	S.0°34'E.	40.62✓		40.62✓	0.40✓	
	S.0°09'E.	40.32✓		40.32✓	0.10✓	
	S.0°16'E.	160.76✓		160.76✓	0.75✓	
	S.0°29'W.	41.06✓		41.06✓		0.36✓
	S.0°24'E.	41.10		41.10	0.28✓	
	S.0°52'E.	38.53		38.51	0.58	
	S.0°14'E.	40.64✓		40.64✓	0.16✓	
	S.0°09'E.	80.38✓		80.38✓	0.21✓	
Convergency						0.30
	Totals,		<u>484.84</u> ✓	<u>484.48</u>	<u>242.12</u>	<u>242.00</u> ✓
			<u>484.48</u>		<u>242.00</u>	
	Error in lat.and dep.		0.36		0.12	

For General Description see Subdivisions of T.19 S.,R.9

Jarvey H. Geist
 U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, *Chainman.*

~~For list of names and final oath of assistants see book "J" T. 19 S., R. 11 E.~~ _____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Asman.*

_____, *Asman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Asman.*

_____, *Asman.*

_____, *Flagman.*

Subscribed and sworn to before me this _____

day of _____, 19 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date _____ day of _____, 19 _____, I have well, faithfully, and truly, in _____ proper person; and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of deputy see book "J" T. 19 S., R. 11 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 19 _____

The foregoing field notes of the survey of _____ the South and East Boundaries of _____ Township No. 19 South, Range No. 9 East of the Salt Lake Base and _____ Meridian, Utah,

executed by _____ Harvey D. Heist and Walter A. Sturm
under ^{their} contract No. 320, dated _____ May 3, _____, 19 10, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas H. Hill
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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Page

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Page

" G "

BOOK A-369

E. W.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 9 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors

their

Under his Contract No. 320, dated May 3, 1910

Survey commenced November 8, 1910

Survey completed November 11, 1910

27-10-70

closing 5-25

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chainman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

For preliminary affidavits see book "C" T. 18 S., R. 10 E.

INDEX DIAGRAM.

Township 19 south, Range 9 East.

6	5	4	3	2	1	
			31	28	10	
7	8	9	10	27	11	9
			25	24	8	
16	17	16	15	23	14	7
			22	20	6	
19	20	21	22	19	23	5
			18	17	4	
30	20	28	27	16	26	3
			15	14	3	
31	32	33	34	13	35	2
						36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman
_____, Chainman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman
_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman
_____, Axman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



CHAINS

Survey commenced November 8, 1910, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors: then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude $39^{\circ}07'N.$ $110^{\circ}55'W.$, I set off $39^{\circ}07'N.$ on lat. arc, $16^{\circ}29'S.$ on decl. arc and at 3h. 44m., p.m. l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of my station.

November 8, 1910

November 9: At 4h. 14m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $16^{\circ}41'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively, about $0^{\circ}11'$ west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m., a.m., is $N. 16^{\circ}45'W.$, the angle thus determined gives the

CHAINS

- mag.decl. $16^{\circ}45'$ E.
- From the sec.cor.already described,I run
- N. $0^{\circ}01'$ W.,bet.secs.35 and 36.
- Over level bottom land,through dense undergrowth and scattering timber.
- 9.75 Leave bottom land,undergrowth and timber,bears E.and W.
Ascend over mountainous land,in bottom of hollow,course S.
- 36.00 Leave hollow,course from NE.to S.
Abrupt ascent along steep,east slope.
- 40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 35 on W. half,S 36 on E.half,dig pits,18x18x12 ins.,N.and S.of post,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
- 56.00 Begin abrupt ascent over sandstone ledges,bearing E. and W.
- 70.00 Leave ledges,bearing E.and W.,150 ft.above foot.
Ascend.
- 71.50 Ridge,bears E.and W.
Descend over rolling land,through sparse undergrowth.
- 80.00 Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.25-26-35 and 36,marked on brass cap,T 19 S S 26 in NW.,
R 9 E S 25 in NE.,
S 36 in SE.and S 35 in SW.quadrant,and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
Pits impracticable.
Land,level and mountainous.
Soil,loam,1st.rate on 9.75 chs.
balance,rocky,3rd.and 4th.rate.
Timber,cottonwood.
Undergrowth,greasewood,willows,shad scale and sage brush.
Mountainous land or land covered with dense undergrowth on 80.00 chs.

SUBDIVISIONS OF T.19 S., R.9 E.

CHAINS

East, on a random line, bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.

Thence I run

S. 89° 59' W., on a true line,

Bet. secs. 25 and 36.

Ascend abrupt over sandstone ledges, bearing N. and S.

6.00 Sandstone spur, projects S.

Abrupt descent over solid sandstone.

13.50 Hollow, 250 ft. below top of spur, course S.

Abrupt ascent over solid sandstone.

26.00 Top of sandstone ledges, and ridge, bears NE. and SW.

Descend over rolling land, through sparse undergrowth.

39.96 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 25 on N. half, S 36 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

79.92 The cor. of secs. 25-26-35 and 36.

Land, mountainous and rolling.

Soil, solid sandstone ledges, 4th. rate on 26.00 chs.

balance, sandy, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 26.00 chs.

N. 0° 01' W., bet. secs. 25 and 26.

Descend over rolling land, through sparse undergrowth.

38.50 Hollow, 50 ft. deep, course SW.

Ascend.

39.50 Begin descent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on W. half, S 25 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

CHAINS

- 54.00 Hollow, 50 ft. deep, course SW.
Ascend over rolling land.
- 75.00 Begin abrupt ascent over rocky and mountainous land,
bears NE. and SW.
- 79.00 Spur, projects SE.
Descend along steep, east slope.
- 80.00 In head of hollow, course SE.
Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
ground, for cor. of secs. 23-24-25 and 26, marked on brass
cap T 19 S S 23 in NW.,
R 9 E S 24 in NE.,
S 25 in SE. and S 26 in SW. quadrant, and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Land, rolling and mountainous.
Soil, sandy, 2nd. rate on 75.00 chs.
balance, rocky, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
Mountainous land on 5.00 chs.
-
- N. 89°59' E., on a random line, bet. secs. 24 and 25.
- 40.00 Set temp. ¼ sec. cor.
- 79.90 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs.
19-24-25 and 30, heretofore described.
Thence I run
S. 89°58' W., on a true line,
Bet. secs. 24 and 25.
Descend over rolling land, through sparse undergrowth.
- 39.95 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for ¼ sec. cor., marked on brass cap, ¼ S 24 on N.
half, S 25 on S. half, and raise a mound 2 ft. base, 1½ ft.
high, N. of cor.
Pits impracticable.
- 55.00 Hollow, 50 ft. deep, course SE.
Ascend.

CHAINS

- 57.00 Begin abrupt ascent over rocky and mountainous land, bearing NE. and SW.
- 63.70 Rocky spur, projects SW.
Abrupt descent.
- 73.50 Hollow, 75 ft. deep, course S.
Ascend.
- 78.50 Spur, projects SE.
Descend.
- 79.90 The cor. of secs. 23-24-25 and 26.
Land, rolling and mountainous.
Soil, sandy, 2nd. rate on 57.00 chs.
balance, rocky, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
Mountainous land on 22.90 chs.
- N. 0° 01' W., bet. secs. 23 and 24.
- 3.75 Ascend abruptly over rocky and mountainous land; through sparse undergrowth.
Rocky spur, projects SW.
Descend.
- 11.00 Hollow, 50 ft. deep, course SW.
Ascend over rolling land.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on W. half, S 24 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 43.00 Spur, projects NW.
Descend.
- 48.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 71.00 Ridge, bears NE. and SW.
Descend.
- 75.00 Hollow, 75 ft. deep, course SW.
Ascend.

CHAINS	
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked on brass cap, T 19 S S 14 in NW., R 9 E S 13 in NE., S 24 in SE. and S 23 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous and rolling. Soil, rocky, 3rd. rate. No timber. Undergrowth, shad scale and sage brush. Mountainous land on 11.00 chs. November 9: At this cor. I set off 16°48' S. on decl. arc, and at 11h.44m. a.m. I. m. t., observe the sun on the meridian the resulting lat. is 39°10' N.</p>
40.00	<p>N. 89°58' E., on a random line, bet. secs. 13 and 24.</p>
40.00	<p>Set temp. ¼ sec. cor.</p>
79.88	<p>Intersect E. bdy. of Tp., 14 lks. N. of the cor. of secs. 13-18-19 and 24, heretofore described. Thence I run N. 89°56' W., on a true line, Bet. secs. 13 and 24.</p>
0.75	<p>Descend over rocky and mountainous land.</p>
0.75	<p>Head of hollow, course NW.</p>
7.00	<p>Ascend.</p>
7.00	<p>Spur, projects NW.</p>
18.00	<p>Descend.</p>
18.00	<p>Hollow, 75 ft. deep, course SW.</p>
28.00	<p>Ascend.</p>
28.00	<p>Ridge, bears NE. and SW.</p>
31.00	<p>Descend.</p>
31.00	<p>Head of hollow, course NW.</p>
35.00	<p>Ascend.</p>
35.00	<p>Spur, projects NW.</p>

SUBDIVISIONS OF T.19 S.,R.9 E.

CHAINS	
	Descend.
39.94	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on N. half, S 24 on S. half, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
40.90	Hollow, 50 ft. deep, course N. Ascend.
45.50	Spur, projects N. Descend.
63.00	Hollow, 75 ft. deep, course NW. Abrupt ascent.
70.00	Rocky spur, projects N. Abrupt descent.
74.00	Hollow, 75 ft. deep, course SW. Ascend.
78.00	Spur, projects S. Descend.
79.28	The cor. of secs. 13-14-23 and 24. Land, mountainous. Soil, rocky, 3rd. and 4th. rate. No timber. Mountainous land on 79.28 chs.

N. 0° 01' W., bet. secs. 13 and 14.

	Ascend over rocky and mountainous land.
12.00	Spur, projects W. Descend.
16.00	Hollow, 50 ft. deep, course W. Ascend.
18.00	Spur, projects W. Descend.
24.75	Hollow, 75 ft. deep, course W. Ascend.
38.00	Ridge, bears E. and W. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on W. half S 13 on E. half, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

CHAINS

Pits impracticable.

52.00 Enter bottom of hollow, course from SW. to N.
 Descend in bottom of hollow.

62.00 Leave hollow, course from S. to NW.
 Ascend.

64.00 spur, projects W.
 Descend.

68.00 Hollow, 50 ft. deep, course SW.
 Ascend.

75.00 Spur, projects SW.
 Descend.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
 ground, for cor. of secs. 11-12-13 and 14, marked on brass
 cap, T 19 S S 11 in NW.,
 R 9 E S 12 in NE.,
 S 13 in SE. and S 14 in SW. quadrant, and raise a mound
 of stone, 2 ft. base, 1½ ft. high, W. of cor.
 Pits impracticable.
 Land, mountainous.
 Soil, rocky, 3rd. and 4th. rate.
 No timber.
 Mountainous land on 80.00 chs.

S. 89° 56' E., on a random line, bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

79.78 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs.
 7-12-13 and 18, heretofore described.
 Thence I run
 N. 89° 55' W., on a true line,
 Bet. secs. 12 and 13.
 Ascend over rocky land.

2.00 Spur, projects NE.

CHAINS	
46.00	Spur,projects E. Descend.
47.50	Hollow,50 ft.deep,course E. Ascend abruptly over mountainous land.
49.75	Spur,projects E. Abrupt descent.
60.25	Hollow,100 ft.deep,course E. Abrupt ascent.
65.25	Ridge,bears NE.and SW. Abrupt descent.
79.75	Hollow,75 ft.deep,course NE. Abrupt ascent.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.1-2-11 and 12,marked on brass cap,T 19 S S 2 in NW., R 9 E S 1 in NE., S 12 in SE.and S 11 in SW.quadrant,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.. Pits impracticable. Land,rolling and mountainous. Soil,rocky,3rd.and 4th.rate. No timber. Mountainous land on 32.50 chs.
40.00	S.89°55'E.,on a random line,bet.secs.1 and 12. Set temp.¼ sec.cor.
79.80	Intersect E.bdy.of Tp.,9 lks.N.of the cor.of secs. 1-6-7 and 12,heretofore described. Thence I run N.89°51'W.,on a true line, Bet.secs.1 and 12.
4.00	Ascend over rolling and rocky land. Spur,projects NE. Descend.
28.00	Hollow,50 ft.deep,course S. Ascend.

SUBDIVISIONS OF T.19 S.,R.9 E.

CHAINS

- 39.90 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 1 on N. half, S 12 in S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 48.00 Begin abrupt ascent over rocky and mountainous land, bearing NE. and SW.
- 60.00 Rocky spur, projects NE.
Descend.
- 64.00 Hollow, 25 ft. deep, course NE.
Ascend.
- 66.00 Spur, projects NE.
Descend.
- 67.00 Hollow, 50 ft. deep, course NE.
Ascend.
- 73.75 Spur, projects NE.
Abrupt descent along steep, north slope.
- 79.00 Hollow, 75 ft. deep, course NE.
Ascend.
- 79.80 The cor. of secs. 1-2-11 and 12.
Land, rolling and mountainous.
Soil, rocky, 3rd. rate.
No timber.
Mountainous and on 31.80 chs.
-
- Knowing from the retracement of the N. bdy. of the Tp., that the line bet. secs. 1 and 2 will not close within limits on the N. bdy. of the Tp., I run
N. 0° 01' W., on a true line, bet. secs. 1 and 2.
Ascend over rocky and mountainous land.
- 2.00 Spur, projects NE.
Descend.
- 4.20 Hollow, 35 ft. deep, course E.
Ascend.
- 8.00 Spur, projects E.
Descend.

CHAINS

- 12.00 Hollow, 100 ft. deep, course SE.
Abrupt ascent.
- 24.40 Ridge, bears NW. and SE.
Descend over rolling and rocky land.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 2 on W. half, S 1 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 56.40 Road from Green River to Castledale, bears E. and W.
- 64.00 Hollow, 50 ft. deep, course W.
Ascend abruptly.
- 70.00 Ridge, bears NW. and SE.
Abrupt descent.
- 84.29 Intersect S. bdy. of T.18 S..R.9 E., 69 lks. N. $89^{\circ}36'$ E., from the cor. of secs. 1-2-35 and 36, heretofore described.
Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for closing cor. of secs. 1 and 2, marked on brass cap, T 18 S R 9 E S 35 S 36 CC on N. half, and T 19 S R 9 E S 1 S 2' on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
Pits impracticable.
- Note:
On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.
I destroy all marks on the cor. of secs. 1-2-35 and 36, that pertain to T.19 S.
Land, mountainous, and rolling.
Soil, rocky, 3rd. and 4th. rate.
No timber.
Mountainous land on 44.69 chs.

November 9, 1910

CHAINS

November 10: At 7h.44m., a.m., l.m.t., I set off $39^{\circ}07'N$. on lat.arc, $16^{\circ}58'S$. on decl.arc, and determine a meridian with the solar at the cor. of secs. 2-3-34 and 35, on the S.bdy. of the Tp., heretofore described.

Thence I run

$N.0^{\circ}01'W.$, bet. secs. 34. and 35.

In bottom of hollow, course E.

- 0.25 Begin abrupt ascent over sandstone ledges, bearing E. and W.
- 24.10 Ridge, bears E. and W.
Descend over rolling and sandy land, through sparse undergrowth.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 34 on W. half, S 35 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 48.00 Hollow, 40 ft. deep, course NE.
Ascend.
- 55.00 Spur, projects NE.
Descend.
- 63.50 Hollow, 50 ft. deep, course NE.
Ascend.
- 71.00 Spur, projects NE.
Descend.
- 79.60 Hollow, 20 ft. deep, course NE.
Ascend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked on brass cap, T 19 S S 27 in NW.,
R 9 E S 26 in NE.,
S 35 in SE. and S 34 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
Land, mountainous and rolling.
Soil, rocky, 4th. rate on 24.10 chs.
balance, sandy, 2nd. rate.

CHAINS

- No timber.
- Undergrowth,shad scale and sage brush.
- Mountainous land on 24.10 chs.
-
- East,on a random line,bet.secs.26 and 35.
- 40.00 Set temp. $\frac{1}{2}$ sec.cor.
- 80.02 Intersect N.and S.line,3 lks.N.of the cor.of secs.
25-26-35 and 36.
- Thence I run
- N.89°59'W.,on a true line,
- Bet.secs.26 and 35.
- Descend over rolling land,through sparse undergrowth.
- 15.00 Hollow,50 ft.deep,course NW.
- Ascend.
- 21.65 Spur,projects NE.
- Descend.
- 32.00 Hollow,75 ft.deep,course SW.
- Ascend.
- 37.30 Ridge,bears NE.and SW.
- Descend.
- 40.01 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
ground,for $\frac{1}{2}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 26 on N.
half,S 35 on S.half,dig pits,18x18x12 ins.,E.and W.of
post,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base,
 $1\frac{1}{2}$ ft.high,N.of cor.
- 68.00 Hollow,100 ft.deep,course SW.
- Abrupt ascent.
- 72.00 Rocky spur,projects SW.
- Abrupt descent.
- 76.00 Enter bottom land,bears NW.and SE.
- Over level land,through sparse undergrowth.
- 77.50 San Rafael River,60 lks.wide,15 ins.deep,course SE.
- 78.10 Leave river bottom bears NW.and SE.
- Abrupt ascent over sandstone ledges.
- 78.50 Rocky spur,100 ft.above river,projects NE.
- Descend.

CHAINS

- 79.75 Hollow, 20 ft. deep, course NE.
Ascend.
- 80.02 The cor. of secs. 26-27-34 and 35.
Land, rolling, mountainous, and level.
Soil, rocky, 3rd. and 4th. rate, 10.02 chs.
balance, sandy, 2nd. rate.
No timber.
Undergrowth, shad scale, greasewood and sage brush.
Mountainous land on 9.92 chs.

West, on a random line, bet. secs. 27 and 34.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Intersect N. and S. line, 35 lks. S. of the cor. of secs.
27-28-33 and 34, heretofore described.
Thence I run
S. $89^{\circ}45'$ E., on a true line,
Bet. secs. 27 and 34.
Ascend over rocky, broken and mountainous land.
- 32.00 Ridge, bears NE. and SW.
Abrupt descent.
- 36.00 Hollow, 75 ft. below ridge, course NE.
Ascend.
- 39.99 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 27 on N. half
S 34 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$
ft. high, N. of cor.
Pits impracticable.
- 42.20 Spur, projects NE.
Abrupt descent.
- 43.50 Hollow, 75 ft. deep, course NE.
Ascend.
- 46.00 Spur, projects NE.
Descend.
- 61.00 Hollow, 75 ft. deep, course NE.
Ascend.

CHAINS	
69.00	Spur, projects NE. Descend.
73.00	Hollow, 75 ft. deep, course NE. Ascend.
78.00	Spur, projects NE. Descend.
79.98	The cor. of secs. 26-27-34 and 35. Land, mountainous. Soil, rocky, 3rd. and 4th. rate. No timber. Mountainous land on 79.98 chs.
	N.0°01'W., bet. secs. 26 and 27.
	Ascend over rocky land.
1.50	Spur, projects NE. Abrupt descent.
4.00	Begin abrupt descent over sandstone ledges, bearing NW. and SE.
5.10	To south side of San Rafael River, course from N. to SE. Along middle of river, 50 lks. wide, 15 ins. deep.
12.00	Leave river, course from NW. to S. In sandy bottom land.
14.00	Begin abrupt ascent, over rocky land, bears NW. and SE.
18.50	Rocky spur, projects SW. Descend.
25.50	Leave rocky land, bears NE. and SW. Over level sandy land, through dense undergrowth.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 27 on W. half, S 26 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
46.00	Begin abrupt ascent over broken sandstone ledges, bearing E. and W.
63.00	Rocky spur, 200 ft. above the river, projects W. Descend.

CHAINS

71.00 Hollow, 75 ft. deep, course W.
Abrupt ascent.

77.00 Rocky spur, projects W.
Descend over boulders.

78.50 Leave rocky land, enter level sandy flat, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked on brass cap, T 19 S S 22 in NW.,
R 9 E S 23 in NE.,
S 26 in SE. and S 27 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate, on 49.10 chs.
balance, sandy, 2nd. rate.
No timber.
Undergrowth, greasewood and sage brush.
Mountainous land on 49.10 chs.
November 10: At this cor. I set off 17°03'S. on decl. arc, and at 11h.44m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 39°09'N.
S. 89°59'E., on a random line, bet. secs. 23 and 26.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 23-24-25 and 26.
Thence I run
N. 89°56'W., on a true line,
Bet. secs. 23 and 26.
Ascend over rocky and mountainous land.

2.00 Spur, projects SE.
Descend along broken and rocky south slope.

17.00 Hollow, 75 ft. deep, course S.
Ascend along broken and rocky south slope.

36.00 Rocky ridge, bears N. and S.
Abrupt descent.

CHAINS

- 28.00 Rocky spur, projects SW.
Abrupt descent.
- 34.00 Hollow, 75 ft. deep, course SW.
Ascend.
- 40.68 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 22 on N. half, S 27 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 46.00 Rocky ridge, bears N. and S.
Descend.
- 55.00 Hollow, 50 ft. deep, course S.
Ascend.
- 61.00 Rocky spur, projects S.
Abrupt descent.
- 68.00 Hollow, 100 ft. deep, course S.
Abrupt ascent over sandstone ledges.
- 73.00 Top of abrupt ascent, bears NW. and SE.
Over level sandy land.
- 80.68 The cor. of secs. 22-23-26 and 27.
Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate, on 53.50 chs.
balance, sandy, 2nd. rate.
No timber.
Undergrowth, greasewood and sage brush.
Mountainous land on 53.50 chs.
N. 0° 01' W., bet. secs. 22 and 23.
Over level sandy land.
- 9.00 Begin ascent over sandstone boulders, bearing E. and W.
- 11.00 Rocky spur, projects W.
Abrupt descent.
- 33.00 Hollow, 100 ft. deep, course SW.
Abrupt ascent.

CHAINS	
36.00	Rocky spur, projects E. Descend.
39.00	Same hollow, 100 ft. deep, course E. Abrupt ascent.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on W. half, S 23 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
44.00	Spur, projects W. Descend.
51.00	Same hollow, 100 ft. deep, course SW. Abrupt ascent.
58.20	Rocky spur, projects SW. Abrupt descent.
74.00	Hollow, 100 ft. deep, course SW. Abrupt ascent along steep, east slope.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked on brass cap, T 19 S S 15 in NW., R 9 E S 14 in NE., S 23 in SE. and S 22 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous and level. Soil, rocky, 3rd. and 4th. rate on 71.00 chs. balance, sandy, 2nd. rate. No timber. Mountainous land on 71.00 chs.
	S. 89°56'E., on a random line, bet. secs. 14 and 23.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. and S. line, 12 lks. S. of the cor. of secs. 13-14-23 and 24.
	Thence I run

CHAINS

S.89°59'W., on a true line,
Bet. secs. 14 and 23.

Descend over rocky and mountainous land.

2.25 Hollow, 75 ft. deep, course S.

Ascend.

5.50 Rocky spur, projects SW.

Descend.

22.75 Hollow, 75 ft. deep, course NW.

Ascend.

24.60 Rocky spur, projects N.

Descend.

26.25 Bend in same hollow, 75 ft. deep, course from NE. to NW.

Ascend.

30.00 Rocky spur, projects NW.

Descend.

33.50 Same hollow, 75 ft. deep, course S.

Ascend.

35.50 Rocky spur, projects S.

Descend.

37.00 Hollow, 50 ft. deep, course S.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on N.
half, S 23 on S. half, and raise a mound of stone, 2 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

56.10 Rocky ridge, bears NE. and SW.

Abrupt descent.

73.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

75.00 Rocky spur, projects S.

Abrupt descent.

78.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

80.00 The cor. of secs. 14-15-22 and 23.

CHAINS

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.00 chs.

November 10, 1910

November 11: At 7h.44m., a.m., l.m.t., I set off $39^{\circ}10'N.$ on lat. arc, $17^{\circ}15'S.$ on decl. arc, and determine a meridian with the solar, at the cor. of secs. 14-15-22 and 23.

Knowing from the retracement of the subdivisions that the line bet. secs. 15 and 22, will not close within limits on the cor. of secs. 15-16-21 and 22, I run

$S.89^{\circ}58'W.$, on a true line,

Bet. secs. 15 and 22.

Ascend over rocky and mountainous land, over broken ledges.

3.00 Rocky spur, projects SE.

Abrupt descent.

7.00 Hollow, 75 ft. deep, course SE.

Abrupt ascent.

11.50 Rocky ridge, bears NW. and SE.

Descend abruptly along broken, south slope.

38.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on N. half, S 22 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

49.00 Rocky spur, projects SW.

Abrupt descent.

59.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

64.50 Rocky ridge, bears NE. and SW.

Abrupt descent.

71.00 Hollow, 75 ft. deep, course NW.

CHAINS

Ascend.

75.00 Spur, projects N.

Descend.

78.00 Hollow, 100 ft. deep, course SW.

Ascend.

80.64 Intersect E. bdy. of sec. 21, 1.67 chs., S. 0° 39' W., from the cor. of secs. 15-16-21 and 22, heretofore described.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 15 and 22, marked on brass cap, T 19 S R 9 E on N. half, S 16 S 21 CC on W. half, and S 15 S 22 on E. half, and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.

Pite impracticable.

I destroy all marks on the cor. of secs. 15-16-21 and 22 that pertain to secs. 15 and 22.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.64 chs.

N. 0° 01' W., bet. secs. 14 and 15.

Descend over rocky and mountainous land, along east slope.

7.00 Bend in hollow, 75 ft. deep, course from NE. to SE.

Ascend.

12.00 Spur, projects E.

Descend.

16.00 Hollow, 75 ft. deep, course E.

Abrupt ascent over broken land.

32.00 Rocky spur, projects W.

Abrupt descent.

36.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ¼ S 15 on W. half, 8 1/4 on E. half, and raise a mound of stone, 2 ft. base

CHAINS	
	<p>1½ ft. high, W. of cor.</p> <p>Pits impracticable.</p>
41.25	<p>Ridge, bears NE. and SW.</p> <p>Abrupt descent.</p>
46.00	<p>Hollow, 75 ft. deep, course W.</p> <p>Abrupt ascent.</p>
54.85	<p>Rocky spur, projects W.</p> <p>Abrupt descent.</p>
61.25	<p>Hollow, 100 ft. deep, course SW.</p> <p>Abrupt ascent.</p>
64.50	<p>Spur, projects SW.</p> <p>Descend.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked on brass cap, T 19 S 10' in NW., R 9 E S 11' in NE., S 14 in SE. and S 15 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>Pits impracticable.</p> <p>Land, mountainous.</p> <p>Soil, rocky, 3rd. and 4th. rate.</p> <p>No timber.</p> <p>Mountainous land on 80.00 chs.</p> <p>N. 89° 59' E., on a random line, bet. secs. 11 and 14.</p>
40.00	<p>Set temp. ¼ sec. cor.</p>
80.02	<p>Intersect N. and S. line, 9 lks. N. of the cor. of secs. 11-12-13 and 14.</p> <p>Thence I run</p> <p>N. 89° 57' W., on a true line,</p> <p>Bet. secs. 11 and 14.</p> <p>Descend over rocky and mountainous land.</p>
4.00	<p>Hollow, 75 ft. deep, course SW.</p> <p>Ascend over rocky and broken S. slope.</p>
37.15	<p>Rocky spur, projects S.</p> <p>Descend.</p>

CHAINS

- 38.00 Hollow, 50 ft. deep, course S.
Ascend.
- 39.60 Spur, projects S.
Descend.
- 40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on N. half, S 14 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 42.00 Hollow, 50 ft. deep, course S.
Abrupt ascent.
- 43.50 Spur, projects S.
Abrupt descent.
- 46.25 Hollow, 75 ft. deep, course S.
Abrupt ascent.
- 51.75 Ridge, bears NE. and SW.
Descend over broken land.
- 80.02 The cor. of secs. 10-11-14 and 15.
Land, mountainous.
Soil, rocky, 3rd. and 4th. rate.
No timber.
Mountainous land on 80.02 chs.
-
- Knowing from retracements that the line bet. secs. 10 and 15 will not close within limits on the cor. of secs. 9-10-15 and 16, I run
S. $89^{\circ}58'W.$, on a true line,
Bet. secs. 10. and 15.
Descend over rocky and mountainous land.
- 1.00 Hollow, 75 ft. deep, course SW.
Ascend.
- 8.00 Spur, projects, SW.
Descend.
- 10.75 Hollow, 50 ft. deep, course SW.
Abrupt ascent.

CHAINS

- 13.00 Spur, projects S.
Abrupt descent.
- 15.00 Hollow, 50 ft. deep, course S.
Abrupt ascent.
- 17.50 Spur, projects S.
Abrupt descent.
- 23.00 Hollow, 75 ft. deep, course SE.
Abrupt ascent.
- 30.90 Ridge, bears NE. and SW.
Descend along steep, north slope.
- 39.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 10 on N. half, S 15 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 41.85 Rocky spur, projects NW.
Abrupt descent.
- 45.50 Hollow, 75 ft. deep, course NW.
Ascend.
- 48.00 Spur, projects NW.
Descend.
- 54.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 68.20 Spur, projects N.
Abrupt descent.
- 73.25 Hollow, 75 ft. deep, course NW.
Abrupt ascent.
- 80.35 Rocky spur, projects N.
Abrupt descent.
- 80.84 Intersect E. bdy. of sec. 16, 2.18 chs., S. 0° 16' E., from the re-established cor. of secs. 9-10-15 and 16, heretofore described.
Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 10 and 15, marked on brass

CHAINS

cap, T 19 S R 9 E on N. half,
 S 9 S 16 CC on W. half, and
 S 10 S 15 on E. half, and raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, E. of cor.
 Pits impracticable.

I destroy all marks on the cor. of secs. 9-10-15 and 16,
 that pertain to secs. 10 and 15.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.84 chs.

November 11: At this cor. I set off $17^{\circ}20'S$. on decl. arc,
 and at 11h. 44m., a.m., l.m.t., observe the sun on the
 meridian, the resulting lat. is $39^{\circ}10'N$.

N. $0^{\circ}01'W$.; bet. secs. 10 and 11.

Descend over rocky and mountainous land.

7.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

14.00 Ridge, bears NE. and SW.

Descend.

21.00 Hollow, 50 ft. deep, course W.

Ascend.

26.00 Spur, projects W.

Descend.

28.00 Hollow, 40 ft. deep, course W.

Ascend.

30.50 Ridge, bears E. and W.

Descend.

35.00 Hollow, 50 ft. deep, course NW.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 10 on W.
 half, S 11 on E. half, and raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, W. of cor.

CHAINS

- Pits impracticable.
- 43.00 Spur, projects W.
Descend.
- 48.00 Hollow, 50 ft. deep, course W.
Ascend.
- 52.00 Ridge, bears E. and W.
Descend.
- 56.00 Hollow, 50 ft. deep, course W.
Ascend.
- 58.50 Spur, projects W.
Descend.
- 70.10 Hollow, 75 ft. deep, course SW.
Ascend.
- 79.70 Ridge, bears NE. and SW.
Descend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked on brass cap T 19 S S 3 in NW.,
R 9 E S 2 in NE.,
S 11 in SE. and S 10 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, mountainous.
Soil, clay and shale, covered with loose rock, 4th. rate.
No timber or vegetation.
Mountainous land on 80.00 chs.
-
- S. $89^{\circ}57'$ E., on a random line, bet. secs. 2 and 11.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 1-2-11 and 12.
Thence I run
N. $89^{\circ}58'$ W., on a true line,
Bet. secs. 2 and 11.

SUBDIVISIONS OF T.19 S.,R.9 E.

CHAINS	
	Ascend over rocky and mountainous land.
5.00	Ridge,bears N.and S. Descend.
8.00	Hollow,50 ft.deep,course S. Ascend.
10.00	Ridge,bears N.and S. Descend.
20.00	Hollow,50 ft.deep,course S. Ascend.
23.00	Ridge,bears N.and S. Descend.
25.00	Hollow,30 ft.deep,course S. Ascend.
28.00	Spur,projects, S. Descend.
31.00	Hollow,35 ft.deep,course S. Ascend.
33.00	Ridge,bears N.and S. Descend.
38.00	Hollow,50 ft.deep,course S. Ascend.
39.98	Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 2 on N. half,S 11 on S.half,and raise a mound of stone,2 ft. base, $1\frac{1}{2}$ ft.high,N.of cor. Pits impracticable.
45.00	Ridge,bears N.and S. Descend.
52.00	Hollow,50 ft.deep,course S. Ascend.
55.00	Ridge,bears N.and S. Descend.
60.00	Hollow,40 ft.deep,course S. Ascend.
67.00	Ridge,bears N.and S. Descend.

CHAINS

- 69.00 Head of hollow, course SW.
Ascend.
- 79.50 Ridge, bears NE. and SW.
Descend.
- 79.96 The cor. of secs. 2-3-10 and 11.
Land, mountainous.
Soil, clay and shale, covered with loose rock, 4th. rate.
No timber or vegetation.
Mountainous land on 79.96 chs.
-
- Knowing from retracements that the line bet. secs. 3 and 10 will not close within limits on the cor. of secs. 3-4-9 and 10, I run
S. 89° 58' W., on a true line,
Bet. secs. 3 and 10.
Descend over rocky and mountainous land.
- 0.15 Head of hollow, course NW.
Abrupt ascent.
- 1.50 Spur, projects NW.
Abrupt descent.
- 12.00 Hollow, 75 ft. deep, course SW.
Ascend.
- 16.50 Spur, projects S.
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S $\frac{3}{4}$ on N. half, S 10° on S. half, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 49.50 Hollow, 75 ft. deep, course SW.
Ascend over rolling land.
- 81.10 Intersect E. bdy. of sec. 9, 2.63 chs., S. 0° 16' E., from the cor. of secs. 3-4-9 and 10, heretofore described.
Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 3 and 10, marked on brass cap, T 19 S R 9 E on N. half,

CHAINS

S 4 S 9 CC on W.half, and
S 3 S 10 on E.half, and raise a mound of stone, 2 ft. base,
1½ ft. high, E. of cor.

Pits impracticable.

I destroy all marks on the cor. of secs. 3-4-9 and 10,
that pertain to secs. 3 and 10.

Land, mountainous and rolling.

Soil, clay and shale, covered with loose rock.

No timber or vegetation.

Mountainous land on 49.50 chs.

Knowing the line bet. secs. 2 and 3 will not close within
limits on the N. bdy. of the Tp., I run

N. 0° 01' W., bet. secs. 2 and 3.

Descend over rocky and mountainous land.

3.75 Hollow, 50 ft. deep, course W.

Ascend.

6.50 Ridge, bears E. and W.

Descend.

8.75 Hollow, 50 ft. deep, course NW.

Ascend.

12.10 Ridge, bears NW. and SE.

Descend.

24.00 Hollow, 50 ft. deep, course NW.

Ascend.

24.60 Spur, projects NW.

Descend.

28.00 Hollow, 50 ft. deep, course NW.

Ascend.

30.00 Spur, projects W.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for ¼ sec. cor., marked on brass cap, ¼ S 3 on W.
half, S 2 on E. half, and raise a mound of stone, 2 ft. base
1½ ft. high, W. of cor.

Pits impracticable.

CHAINS	
41.15	Hollow,75 ft.deep,course W. Ascend.
43.00	Spur,projects W. Descend.
48.00	Hollow,40 ft.deep,course NW. Ascend.
51.00	Spur,projects W. Descend.
58.00	Hollow,75 ft.deep,course W. Abrupt ascent.
63.00	Road from Green River to Castledale,bears E.and W.,on top of spur,projects W. Descend.
68.00	Head of hollow,course W. Ascend.
68.91	Road from Green River to Castledale,bears E.and W. This road is used as a short cut,being steeper than the first mentioned road.
71.75	Rocky spur,projects NW. Descend.
73.80	Hollow,50 ft.deep,course NW. Ascend.
76.25	Spur,projects NW. Descend.
83.85	Intersect N.bdy.of Tp.,111 lks.N.89°31'E.,from the cor. of secs.2-3-34 and 35,heretofore described. Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for closing cor.of secs.2 and 3,marked on brass cap,T 18 S R 9 E S 34 S 35 CC on N.half,and T 19 S R 9 E S 2 S 3 on S.half,and raise a mound of stone,2 ft.base,1½ ft.high,S.of cor. Pits impracticable. I destroy all marks on the cor.of secs.2-3-34 and 35, that pertain to T.19 S. Land,mountainous. Soil,clay,shale and rocky,3rd.and 4th.rate. No timber.

CHAINS

Mountainous land on 83.85 chs.

November 11, 1910

G E N E R A L D E S C R I P T I O N .

This fractional township is located in the "Bad Lands" along San Rafael River, which flows through the southwestern portion of it, and the surface is generally clay or shale, knolls or ridges, cut by many hollows all of which drain into the river.

The northern portion supports neither timber nor vegetation and is unfit for any purpose while the southern portion has sandy slopes covered with desert brush and grass and is used for a winter range for sheep.

A scattering growth of cottonwood timber is found along the river, which is the only timber in the township.

The only water in this fractional township is San Rafael River, which flows through secs. 22, 27, 26 and 35, the water is brackish and unfit to use for any purpose.

The bottom land along the river is sandy and covered with greasewood brush, this is the only land in the portion of the township surveyed, where crops could be raised with irrigation.

There are no settlers in this fractional township.

There are no indications of oil, coal or minerals found in this fractional township.

Farway C. Geist
U.S. Deputy Surveyor

REPRODUCIBLE TO UNRESTRICTED

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

For list of names and final oath of assistants see book "K" _____, Chainman.
T. 19 S., R. 11 E. _____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

Subscribed and sworn to before me this _____ day of _____, 19 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date _____ day of _____, 19____, I have well, faithfully, and truly, in _____ proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of deputy see book "K" T. 19 S., R. 11 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes of the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1910

The foregoing field notes of the survey of the subdivisional lines of Town No. 19 South, Range No. 9 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Walter A. Stumm
under his contract No. 320, dated May 3, 1910, has been critically examined, and the necessary corrections and explanations made, the said field notes and surveys they describe, are hereby approved.

[Signature]
United States Surveyor

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor

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FILED
JAN 6 1911
WJD

"H"

BOOK A-369

FIELD NOTES

OF THE SURVEY OF THE

SOUTH and EAST BOUNDARIES

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 10 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist, and Walter A. Stumm, United States Deputy Surveyors,

their

under his Contract No. 320, dated May 3, 1910

Survey commenced November 12, 1910

Survey completed November 15, 1910

Cost	60484 ✓
Smith	60143 ✓
	<hr/>
	120627
	60484
	<hr/>
	117143

NAMES AND DUTIES OF ASSISTANTS.

----- Nathan K. Knight, ----- Chairman -----
 ----- Rodney B. Shelley, ----- "
 ----- Jacob E. Minchey, ----- Moundman -----
 ----- Olef C. Jensen, ----- Axman -----
 ----- Melvin D. Heist, ----- Flagman -----

----- For preliminary affidavits see book "F" T. 19 S., R. 9 E. -----

BOOK A-369

INDEX DIAGRAM.

Township 19 South , Range ... 10 East,

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Meanders Page

6-151

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chains upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we are measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____, Chainman
_____, Chainman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

_____, Moundman
_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



We, _____ and _____ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

_____, Axman
_____, Axman

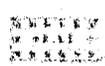
Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____ do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



CHAINS

Survey commenced, November 12, 1910, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows: At the re-established cor. of Tps. 18 and 19 S., Rs. 10 and 11 E., heretofore described, in approximate latitude $39^{\circ}12' N.$, longitude $110^{\circ}47' W.$, I set off $39^{\circ}12' N.$ on lat. arc, $17^{\circ}35' S.$ on decl. arc, and at 3h. 44m., p.m., l.m.t., determine with the solar a. meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

November 12, 1910

November 13: At 3h. 58m., a.m., l.m.t., I observe Polaris, at western elongation in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the west, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. E. of the mark determined by the solar.

At 7h. 44m., a.m., l.m.t., I set off $39^{\circ}12' N.$ on lat. arc, $17^{\circ}46' S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'11" west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m., a.m. is $N. 16^{\circ}45' W.$, the angle thus determined, gives the mag. decl. $16^{\circ}45' E.$

CHAINS	
	From the Tp.cor.already described,I run South, bet.secs.1 and 6. Descend abruptly over broken ledges and conglomerate boulders,through scattering timber.
32.00	Begin abrupt descent over nearly perpendicular sandstone ledges,bearing E.and W. Leave timber.
39.00	Leave sandstone ledges,bearing E.and W. Descend over rocky land and boulders.
41.00	Leave mountainous and rocky land,bears E.and W. Begin gradual descent over nearly level land,through sparse undergrowth.
43.30	A sandstone boulder,15x10x10 ft. on line.
44.84	A distance equal to the N. $\frac{1}{2}$ of sec.6,on W.bdy.of Tp. Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{2}$ S 1 on W. half,S 6 on E.half,dig pits,18x18x12 ins.,N.and S.of post,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high,W.of cor. After diligent search no trace can be found of the old $\frac{1}{4}$ sec.cor.,set on previous survey.
57.22	Road from Green River to Huntington,bears NW.and SE.
84.84	Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the ground,for cor.of secs.1-6-7 and 12, marked on brass cap,T 19 S on N.half, R 10 E S 1 in NW., R 11 E S 6 in NE., S 7 in SE.and S 12 in SW.quadrant,dig pits,18x18x12 ins. in each sec. $5\frac{1}{2}$ ft.dist.,and raise a mound of earth, 4 ft.base,2 ft.high,W.of cor. No trace can be found of the old sec.cor.set on previous survey. This cor.is 1240 ft.lower in elevation than the Tp.cor. Land,mountainous and nearly level. Soil,rocky,3rd.and 4th.rate on 41.00 chs. balance,loam,1st.rate. Timber,cedar and pinon.

CHAINS

Undergrowth shadscale and sagebrush.
 Mountainous land on 41.00 chs.

 South, bet. secs. 7 and 12.

Gradual descent over nearly level land, through sparse undergrowth.

10.00 Wash, 50 lks. wide, 5 ft. deep, course SW.

29.90 Wash, 30 lks. wide, 4 ft. deep, course SW.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap, $\frac{1}{2}$ S 7 on W. half, S 12 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

No trace can be found of the old $\frac{1}{4}$ sec. cor. set on previous survey.

65.00 Begin gradual ascent, bears NE. and SW.

74.80 Road from Green River to Castledale, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone and earth. For cor. of secs. 7-12-13 and 18, marked on brass cap, T 19 S on N. half, ..

R 10 E S 12 in NW.,

R 11 E S 7 in NE.,

S 18 in SE. and S 13 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Note:

On account of natural obstacles it is impossible to set this post over 15 ins. in the ground,

No trace can be found of the old sec. cor. set on previous survey.

Land, nearly level.

Soil, loam, 1st. rate on 65.00 chs.

balance, clay with shale subsoil, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

CHAINS	
	South, bet. secs. 13 and 18.
	Ascend over shale soil, through sparse undergrowth.
4.50	Spur, projects NE.
	Descend.
20.00	Hollow, 50 ft. deep, course SW.
	Ascend.
32.50	Spur, projects NW.
	Descend.
37.00	Hollow, 50 ft. deep, course W.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on W. half, S 18 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	No trace can be found of the old $\frac{1}{4}$ sec. cor. set on previous survey.
44.00	Ridge, bears NE. and SW.
	Abrupt descent over mountainous land.
49.50	Head of hollow, 100 ft. below top of ridge, course SE.
	Abrupt ascent.
57.00	Rocky spur, projects SE.
	Abrupt descent over sandstone ledges.
59.00	Foot of ledges, bears NW. and SE.
	Enter level bottom of Cottonwood Wash, 200 ft. deep, course SE.
	Head of Wash about 25.00 chs. NW.
63.82	Wash, 50 lks. wide, 5 ft. deep, course SE.
66.00	Wash, 50 lks. wide, 5 ft. deep, course E. and mouth of hollow from south.
	Ascend in hollow.
72.00	Leave hollow, course from SW. to N.
	Ascend along steep, west slope over solid sandstone ledges.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.; in mound of stone and earth, for cor. of secs. 13-18-19 and 24, marked on brass cap, T 19 S on N. half, R 10 E S 13 in NW.,

CHAINS

R 11 E S 18 in NE.,

S 19 in SE. and S 24 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Note:

On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

No trace can be found of the cor. of secs. 13-18-19 and 24 set on previous survey.

Land, rolling and mountainous.

Soil, shale, sandy and rocky, 3rd. and 4th. rate.

No timber.

Undergrowth, shad scale, greasewood and sage brush.

Mountainous land on 36.00 chs.

November 13: At this cor. I set off $17^{\circ}52'S$. on decl. arc, and at 11h. 44m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}10'N$.

South, bet. secs. 19 and 24.

Ascend abruptly over sandstone ledges and mountainous land.

5.00 Rocky spur, projects NW.

Abrupt descent.

9.00 Hollow, 75 ft. deep, course W.

Abrupt ascent.

Enter scattering timber.

11.00 Spur, projects W.

Descend.

13.00 Hollow, 30 ft. deep, course W.

Ascend.

21.00 Rocky spur, projects NW.

Descend.

29.50 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

38.00 Ridge, bears NW. and SE.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

CHAINS	
	ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on W. half, S 19 on E. half, from which A cedar, 5 ins. diam., bears N. 45° W., 71 lks. dist., marked $\frac{1}{4}$ S 24 BT. A cedar, 6 ins. diam., bears N. 68° E., 87 lks. dist., marked $\frac{1}{4}$ S 19 BT.
52.00	Hollow, 50 ft. deep, course NW. Ascend over rolling and rocky land.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked on brass cap, T 19 S on N. half, R 10 E S 24 in NW., R 11 E S 19 in NE., S 30 in SE., S 25 in SW. quadrant, from which A cedar, 8 ins. diam., bears N. 50° E., 20 lks. dist., marked T 19 S R 11 E S 19 BT. A cedar, 6 ins. diam., bears S. 2° E., 48 lks. dist., marked T 19 S R 11 E S 30 BT. A cedar, 5 ins. diam., bears S. 43° W., 27 lks. dist., marked T 19 S R 10 E S 25 BT. A cedar, 4 ins. diam., bears N. 49° W., 48 lks. dist., marked T 19 S R 10 E S 24 BT. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 52.00 chs. ----- South, bet. secs. 25 and 30. Ascend over rolling and rocky land, through scattering timber.
3.00	Leave timber.
28.00	Enter scattering timber.
31.00	Ridge, bears NW. and SE. Descend.
36.00	Hollow, 50 ft. deep, course NW. Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

CHAINS

- ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 25 on W. half, S 30 on E. half, from which
- A cedar, 14 ins. diam., bears S. 38° E., 258 lks. dist., marked $\frac{1}{4}$ S 30 BT.
- A cedar, 8 ins. diam., bears N. 10° W., 121 lks. dist., marked $\frac{1}{4}$ S 25 BT.
- 59.80 Ridge, bears NW. and SE.
Descend.
- 65.00 Head of hollow, course NW.
Ascend..
- 70.00 Ridge, bears NE. and SW.
Descend.
- 80.00 Hollow, 50 ft. deep, course NE.
Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 25-30-31 and 36, marked on brass cap, T 19 S on N. half,
R 10 E S 25 in NW.,
R 11 E S 30 in NE.,
S 31 in SE. and S 36 in SW. quadrant, from which
- A cedar, 4 ins. diam., bears N. 27° E., 363 lks. dist., marked T 19 S R 11 E S 30 BT.
- A cedar, 5 ins. diam., bears S. 80° 30' E., 143 lks. dist., marked T 19 S R 11 E S 31 BT.
- A cedar, 11 ins. diam., bears S. 55° 30' W., 141 lks. dist., marked T 19 S R 10 E S 36 BT.
- A cedar, 7 ins. diam., bears N. 73° 30' W., 137 lks. dist., marked T 19 S R 10 E S 25 BT.
- Land, rolling.
Soil, rocky, 3rd. rate.
Timber, cedar and pinon.
- South, bet. secs. 31 and 36.
Ascend over rolling land, through scattering timber.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 36 on W.

CHAINS

half, S 31 on E. half, from which

A cedar, 4 ins. diam., bears S. 8° W., 219 lks. dist.,
marked $\frac{1}{4}$ S 36 BT.

No other trees within limits, dig pits, 18x18x12 ins., N.
and S. of post, 3 ft. dist., and raise a mound of earth,
 $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

48.00 Ridge, bears E. and W.

Descend.

50.10 Head of hollow, course SW.

Ascend.

66.50 Ridge, bears E. and W.

Descend.

71.00 Hollow, 50 ft. deep, course SW.

Ascend.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of Tps. 19 and 20 S., Rs. 10 and 11 E., marked
on brass cap, T 19 S on N. half, S. 20 on S. half,

R 10 E S 36 in NW.,

R 11 E S 31 in NE.,

R 11 E S 6 in SE. and

R 10 E S 1 in SW. quadrant, from which

A pinon, 7 ins. diam., bears N. 31° E., 124 lks. dist.,
marked T 19 S R 11 E S 31 BT.

A pinon, 6 ins. diam., bears S. 89° E., 90 lks. dist.,
marked T 20 S R 11 E S 6 BT.

A pinon, 15 ins. diam., bears S. 66° W., 79 lks. dist.,
marked T 20 S R 10 E S 1 BT.

A cedar, 5 ins. diam., bears N. 31° W., 41 lks. dist.,
marked T 19 S R 10 E S 36 BT.

Land, rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

November 13, 1910

CHAINS

November 14: At 7h.44m.,a.m.,l.m.t.,I set off $39^{\circ}07'N$.
on lat.arc, $18^{\circ}02'S$.on decl.arc,and determine a meridian
with the solar at the cor.of Tps.19 and 20 S.,Rs.10 and
11 E.

Thence I run

West,on a random line,along the S.bdy.of T.19 S.,R.10 E.
setting temp. $\frac{1}{4}$ sec.and sec.cors.at intervals of 40.00
chs.and at 481.43 chs.,fall 30 lks.S.of the cor.of Tps.
19 and 20 S.,Rs.9 and 10 E.,heretofore described.

The falling answers to a correction of $0^{\circ}02'$, or 5 lks.
N.per mile,counting from the SE.cor.of the Tp.,therefore

I run

S. $89^{\circ}58'E$.,on a true line,bet.secs.6 and 31,
marking and blazing true line.

Descend over broken gypsum hills.

12.40 Hollow,75 ft.deep,course SW.

Ascend.

15.00 Spur,projects SW.

Descend.

18.50 Hollow,75 ft.deep,course SW.

Ascend along south slope,over broken gypsum land.

41.43 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 31 on N.
half,S 6 on S.half,and raise a mound of stone,2 ft.base
 $1\frac{1}{2}$ ft.high,N.of cor.

Pits impracticable.

67.25 Spur,projects SW.

Descend.

71.40 Hollow,30 ft.deep,course SW.

Ascend.

73.70 Ridge,bears NE.and SW.

Descend.

78.00 Hollow,25 ft.deep,course SW.

Ascend.

81.43 On spur,projects SW.

CHAINS

Set an iron post, $\frac{3}{4}$ ft. long, $\frac{3}{8}$ ins. dia., 24 ins. in the ground, for cor. of secs. 5-6-31 and 32, marked on brass cap, T 19 S S 31 in NW.,

R 10 E S 32 in NE.,

R 10 E S 5 in SE. and

T 20 S S 6 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, gypsum, 3rd. and 4th. rate.

No timber.

Mountainous land 81.43 chs.

November 14, 1910

November 15: At 7h.45m., a.m., l.m.t., I set off $39^{\circ}07'N$. on lat. arc, $18^{\circ}18'S$. on decl. arc, and determine a meridian with the solar at the cor. of secs. 5-6-31 and 32.

Thence I run

S. $89^{\circ}58'E$., bet. secs. 5 and 32.

Descend over rolling gypsum land.

24.00 Hollow, 50 ft. deep, course SW.

Ascend.

29.00 Begin descent.

31.50 Hollow, 30 ft. deep, course NW.

Ascend over rolling land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on N. half, S 5 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

80.00 Set an iron post, 3 ft. long, $\frac{3}{8}$ ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-32 and 33, marked on brass cap T 19 S S 32 in NW.,

R 10 E S 33 in NE.,

R 10 E S 4 in SE. and

T 20 S S 5 in SW quadrant, and raise a mound of stone,

CHAINS

2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, rolling.

Soil, gypsum, 3rd. and 4th. rate.

No timber.

S. $89^{\circ}58'$ E., bet. secs. 4 and 33.

Ascend over rolling shale land.

4.00 Spur, projects NW.

Descend.

19.00 Hollow, 50 ft. deep, course NW.

Ascend.

30.00 Enter scattering timber.

35.00 Leave timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 33 on N. half, S 4 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

59.00 Enter scattering timber.

60.50 Leave timber.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 3-4-33 and 34, marked on brass cap

T 19 S S 33 in NW.,

R 10 E S 34 in NE.,

R 10 E S 3 in SE. and

T 20 S S 4 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, shale and clay, 3rd. rate.

Timber, cedar and pinon.

S. $89^{\circ}58'$ E., bet. secs. 3 and 34.

Ascend over rocky land.

4.00 Spur, projects NW.

Enter scattering timber.

Descend.

CHAINS	
13.00	Hollow, 50 ft. deep, course N. Ascend.
14.00	Spur, projects N. Descend.
16.75	Hollow, 50 ft. deep, course NW. Ascend.
19.00	Spur, projects NW. Descend.
22.00	Hollow, 50 ft. deep, course NW. Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on N. half, S 3 on S. half, from which A cedar, 15 ins. diam., bears S. 40° E., 23 lks. dist., marked $\frac{1}{4}$ S 3 BT. A cedar, 5 ins. diam., bears N. 57° W., 18 lks. dist., marked $\frac{1}{4}$ S 34 BT.
63.00	Ridge, bears NW. and SE. Descend.
65.40	Hollow, 50 ft. deep, course N. Ascend.
67.50	Spur, projects N. Descend.
79.90	Hollow, 50 ft. deep, course NW. Ascend.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-34 and 35, marked on brass cap T 19 S S 34 in NW., R 10 E S 35 in NE., R 10 E S 2 in SE. and T 20 S S 3 in SW. quadrant, from which A cedar, 8 ins. diam., bears N. 61° E., 130 lks. dist. marked T 19 S R 10 E S 35 BT. A cedar, 12 ins. diam., bears S. 10° E., 102 lks. dist., marked T 20 S R 10 E S 2 BT.

CHAINS

A cedar, 10 ins. diam., bears S. 81° W., 48 lks. dist.,
marked T 20 S R 10 E S 3 BT.

A cedar, 13 ins. diam., bears N. 61° W., 220 lks. dist.,
marked T 19 S R 10 E S 34 BT.

Land, rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

S. 89° 58' E., bet. secs. 2 and 35.

Ascend over rocky and mountainous land, through
scattering timber.

4.50 Ridge, bears NW. and SE.

Abrupt descent.

19.00 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

38.25 Ridge, bears NW. and SE.

Abrupt descent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on N.
half, S 2 on S. half, from which

A cedar, 4 ins. diam., bears N. 4° W., 23 lks. dist.,
marked $\frac{1}{4}$ S 35 BT.

A cedar, 5 ins. diam., bears S. 18° W., 25 lks. dist.,
marked $\frac{1}{4}$ S 2 BT.

45.25 Hollow, 75 ft. deep, course N.

Abrupt ascent.

47.75 Spur, projects N.

Abrupt descent.

50.50 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

55.00 Spur, projects N.

Descend.

60.00 Hollow, 50 ft. deep, course N.

Ascend.

65.50 Spur, projects N.

Descend.

CHAINS

- 71.75 Hollow, 50 ft. deep, course N.
Ascend.
- 75.00 Ridge, bears NE. and SW.
Descend.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1-2-35 and 36, marked on brass cap
T 19 S S 35 in NW.,
R 10 E S 36 in NE.,
R 10 E S 1 in SE., and
T 20 S S 2 in SW., quadrant, from which
A cedar, 5 ins. diam., bears N. 6° E., 51 lks. dist.,
marked T 19 S R 10 E S 36 BT.
A cedar, 7 ins. diam., bears S. 26° E., 116 lks. dist.,
marked T 20 S R 10 E S 1 BT.
A cedar, 5 ins. diam., bears S. 5° W., 119 lks. dist.,
marked T. 20 S R 10 E S 2 BT.
A cedar, 4 ins. diam., bears N. 21° W., 99 lks. dist.,
marked T 19 S R 10 E S 35 BT.
- Land, mountainous.
Soil, rocky, 3rd. rate.
Timber, cedar and pinon.
- Mountainous land on 80.00 chs.
November 15: At this cor. set off 18° 24' S. on decl. arc,
and at 11h. 45m., a.m., l.m.t., observe the sun on the
meridian, the resulting lat. is 39° 07' N.
-
- S' 89° 58' E., bet. secs. 1 and 36.
Descend over rolling and rocky land, through scattering
timber.
- 38.60 Rim of gorge, bears NE. and SW.
Point for witness cor.
Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap
T 19 S R 10 E S 36 on N. half,
S 1 on S. half, and WC $\frac{1}{4}$ on E. half, from which

CHAINS

A pinon, 8 ins. diam., bears S. 55° W., 42 lks. dist.
marked W C $\frac{1}{4}$ S 1 BT.

A pinon, 8 ins. diam., bears N. 19° E., 39 lks. dist.,
marked W C $\frac{1}{4}$ S 36 BT.

Begin abrupt descent over solid sandstone.

40.00 Point for $\frac{1}{4}$ sec. cor. falls on the solid sandstone and
cannot be set.

48.50 Bottom of gorge, 300 ft. deep, course S.
Abrupt ascent over solid sandstone.

56.00 Top of abrupt ascent, bears N. and S.
Leave ledges.

Ascend.

66.00 Spur, projects S.

Descend.

69.90 Begin abrupt descent over sandstone ledges, bearing
N. and S.

74.00 Bottom of gorge, 200 ft. deep, course S.
Abrupt ascent over sandstone ledges.

77.90 Top of abrupt ascent and sandstone ledges, bearing N. and
S.

Ascend.

80.00 The cor. of secs. 19 and 20 S., Rs. 10 and 11 E.

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 41.40 chs.

November 15, 1910

Boundaries of T.19 S., R.10 E.
 Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
N. Bdy.	East	480.80			480.80	
E. Bdy.	South	484.84		484.84		
S. Bdy.	N. 89° 58' W.	481.43	0.28			481.43
W. Bdy.	North	484.84	484.84			
Convergency					0.59	
Totals,			485.12 484.84	484.84	481.39	481.43 481.39
Error in lat.			0.28	Error in dep.		0.04

For General Description see Subdivisions of T.19 S.,
 R.10 E.

Harvey D. First
 U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____
_____, United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

or list of names and final oath of assistants see book "J", Chainman.

T. 15 S., R. 11 E. _____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, which are represented

the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
proper monuments established, according to the instructions furnished by the United States Surveyor
General for _____

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

described and sworn to before me this _____ }
day of _____, 19 _____ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date of
_____ day of _____, 19____, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for _____, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of _____

For final oath of deputy see book "J" T. 19 S., R. 11 E.

_____ of the _____
_____ meridian, in the _____ of _____, which are represented in
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance with
the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for _____ and in the specific manner described in the field notes, and that
the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1912

The foregoing field notes of the survey of the South and East Boundaries of
Township No. 19 South, Range No. 10 East of the Salt Lake Base and
Meridian, Utah,

executed by Harvey D. Heist and Walter A. Stumm
under ^{their} contract No. 320, dated May 3, 1910, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

Thomas Hill
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____
_____ has been correctly copied from the original notes on file in this office.

United States Surveyor General

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FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 10 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Survey D. Heist and Walter A. Stumm, States Deputy Surveyors,

under their Contract No. 320, dated May 3, 1910

they commenced November 16, 1910

they completed November 21, 1910

6030-48

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chainman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

For preliminary affidavits see book "C" T. 18 S., R. 10 E.

Volume

#

R0369

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lay
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we are
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sum-

_____, Cha
_____, Cha

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establish-
ment of corners, according to the instructions given us, to the best of our skill and ability, in the sum-

_____, Moun
_____, Moun

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
corners and other duties, according to instructions given us, to the best of our skill and ability, in the sum-

_____, A
_____, A

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
in the survey of _____

_____, Fla

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



CHAINS

Survey commenced November 15, 1910 and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows: At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude $39^{\circ}07'N.$ longitude $110^{\circ}48'W.$, I set off $39^{\circ}07'N.$ on lat. arc, $18^{\circ}23'S.$ on decl. arc, and at 3h. 45m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

November 15, 1910

November 16: At 3h. 46m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 45m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $18^{\circ}33'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively, about $0'11''$ west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m., a.m. is $N.16^{\circ}45'W.$, the angle thus determined gives the mag. decl. $16^{\circ}45'E.$

CHAINS	
	From the sec.cor.already described, I run N.0°01'W.,bet.secs.35 and 36. Ascend over rocky and mountainous land,through scatter timber.
14.00	Ridge,bears NE.and SW. Descend.
37.00	Hollow,75 ft.deep,course NW. Ascend.
40.00	Spur,projects W. Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.marked on brass cap, $\frac{1}{4}$ S 35 on W. half,S 36 on E.half,from which A pinon,24 ins.diam.,bears N.15°E.,23 lks.dist. marked $\frac{1}{4}$ S 36 BT. A cedar,7 ins.diam.,bears S.25°W.,55 lks.dist., marked $\frac{1}{4}$ S 35 BT. Descend.
43.00	Hollow,50 ft.deep,course W. Ascend.
46.00	Ridge,bears NW.and SE. Descend.
76.00	Hollow,50 ft.deep,course NW. Ascend.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.25-26-35 and 36,marked on brass cap,T 19 S S 26 in NW., R 10 E S 25 in NE., S 36 in SE.and S 35 in SW.quadrant,from which A cedar,7 ins.diam.,bears N.32°E.,57 lks.dist., marked T 19 S R 10 E S 25 BT. A cedar,5 ins.diam.,bears S.22°E.,61 lks.dist., marked T 19 S R 10 E S 36 BT. A cedar,5 ins.diam.,bears S.44°W.,125 lks.dist., marked T 19 S R 10 E S 35 BT. A cedar,5 ins.diam.,bears N.81°W.,59 lks.dist., marked T 19 S R 10 E S 26 BT.

CHAINS

Land, mountainous.
 Soil, rocky, 3rd. rate.
 Timber, cedar and pinon.
 Mountainous land on 80.00 chs.

S. 89° 58' E. ^{an} random line, bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.12 Intersect E. bay 91¹¹ Tp. 11¹⁴ N. of the cor. of secs.
 25-30-31 and 36, heretofore described.
 Thence I run
 N. 89° 58' W., on a true line,
 Bet. secs. 25 and 36.

Ascend over rocky land, through scattering timber.

4.00 Ridge, bears NE. and SW.
 Descend.

8.00 Hollow, 50 ft. deep, course NW.
 Ascend.

11.00 Spur, projects NW.
 Descend.

17.00 Hollow, 50 ft. deep, course N.
 Leave timber.
 Ascend.

21.00 Ridge, bears NW. and SE.
 Descend.

39.50 Hollow, 50 ft. deep, course NW.
 Ascend.

40.06 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap. $\frac{1}{4}$ S 25 on N.
 half, S 36 on S. half, and raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, N. of cor.
 Pits impracticable.

53.00 Enter scattering timber.

69.00 Ridge, bears N. and S.
 Descend.

80.12 The cor. of secs. 25-26-35 and 36.

CHAINS	
	Land, rolling.
	Soil, rocky, 3rd. rate.
	Timber, cedar and pinon.

	N.0°01'W., bet. secs. 25 and 26.
	Ascend over rocky land, through scattering timber.
2.00	Spur, projects W.
	Descend over broken land.
33.00	Hollow, 50 ft. deep, course NW.
	Ascend.
38.00	Ridge, bears NW. and SE.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on W. half, S 25 on E. half, from which
	A cedar, 5 ins. diam., bears S. 49° E., 65 lks. dist., marked $\frac{1}{4}$ S 25 BT.
	A pinon, 4 ins. diam., bears S. 57° W., 101 lks. dist., marked $\frac{1}{4}$ S 26 BT.
44.50	Hollow, 50 ft. deep, course E.
	Ascend.
47.00	Spur, projects E.
	Descend.
57.00	Hollow, 50 ft. deep, course NW.
	Ascend.
59.75	Spur, projects NW.
	Descend.
68.00	Hollow, 50 ft. deep, course NW.
	Ascend.
70.25	Ridge, bears NW. and SE.
	Descend.
78.00	Hollow, 50 ft. deep, course NW.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked on brass cap, T 19 S S 23 in NW., R 10 E S 24 in NE.,

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

S 25 in SE. and S 26 in SW. quadrant, from which

A cedar, 8 ins. diam., bears N. 75° E., 48 lks. dist.,
marked T 19 S R 10 E S 24 BT.

A pinon, 4 ins. diam., bears S. 23° E., 101 lks. dist.,
marked T 19 S R 10 E S 25 BT.

A cedar, 5 ins. diam., bears S. 53° W., 14 lks. dist.,
marked T 19 S R 10 E S 26 BT.

A cedar, 10 ins. diam., bears N. 47° W., 13 lks. dist.,
marked T 19 S R 10 E S 23 BT.

Land, rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

S. 89° 58' E., on a random line, bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs.
19-24-25 and 30, heretofore described.

Thence I run

West, on a true line, bet. secs. 24 and 25.

Descend over rocky and rolling land, through scattering
timber.

35.50 Hollow, 50 ft. deep, course NW.

Ascend.

40.05 On top of spur, projects NW.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on N.
half, S 25 on S. half, from which

A cedar, 5 ins. diam., bears N. 25° 30' E., 81 lks. dist.,
marked $\frac{1}{4}$ S 24 BT.

A cedar, 5 ins. diam., bears S. 41° W., 97 lks. dist.,
marked $\frac{1}{4}$ S 25 BT.

Descend.

44.00 Hollow, 40 ft. deep, course N.

Ascend.

59.00 Spur, projects NW.

Descend.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS	
68.00	Hollow, 50 ft. deep, course N. Ascend.
76.25	Ridge, bears N. and S. Descend.
80.10	The cor. of secs. 23-24-25 and 26. Land, rolling. Soil, rocky, 3rd. rate. Timber, cedar and pinon.
----- N. 0° 01' W., bet. secs. 23 and 24.	
	Ascend over rocky land, through scattering timber.
3.00	Spur, projects W. Descend.
6.00	Hollow, 50 ft. deep, course W. Ascend.
9.40	Spur, projects W. Descend.
32.00	Leave timber.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on W. half, S 24 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
50.00	Hollow, 50 ft. deep, course NW. Ascend.
52.70	Spur, projects W. Descend.
59.00	Enter level land, bears NE. and SW.
73.72	Wash, 100 lks. wide, 20 ft. deep, course NE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked on brass cap, T 19 S S 14 in NW., R 10 E S 13 in NE., S 24 in SE. and S 23 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

Land, rolling and level.
 Soil, rocky, 3rd. rate on 59.00 chs.
 balance, loam, 2nd. rate.
 Timber, Cedar and pinon.
 November 16: At this cor. I set off $18^{\circ}39'S$. on decl. arc,
 and at 11h.45m., a.m., 1.m.t., observe the sun on the
 meridian, the resulting lat. is $39^{\circ}10'N$.

East, on a random line, bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 13-18
 19 and 24, heretofore described.
 Thence I run
 $N.89^{\circ}59'W$., on a true line,
 Bet. secs. 13 and 24.

Descend over solid sandstone ledges and mountainous
 land.

13.00 Hollow, 100 ft. deep, course NE.
 Abrupt ascent over sandstone ledges.

18.00 Rocky ridge, bears NE. and SW.
 Abrupt descent. Leave ledges, over rocky land.

38.15 Hollow, 75 ft. deep, course NE.
 Ascend over rolling land.

40.04 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on N.
 half, S 24 on S. half, dig pits, 18x18x12 ins., E. and W. of
 post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor.

45.00 Enter level land, bears NE. and SW.

55.00 Begin ascent over rolling land, bears NE. and SW.

59.50 Spur, projects NE.
 Descend.

64.00 Enter level land, bears NE. and SW.

67.25 Wash, 50 lks. wide, 20 ft. deep, course N.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS	
71.50	Wash, 100 lks. wide, 25 ft. deep, course NE.
75.00	Begin ascent, bears N. and S.
78.50	N. end of knoll on line, 25 ft. high. Ascend.
80.08	The cor. of secs. 13-14-23 and 24. Land, mountainous, level and rolling. Soil, rocky, 3rd. and 4th. rate on 38.15 chs. balance, loam, 2nd. rate. No timber. Mountainous land on 38.15 chs.
	N. 0° 01' W., bet. secs. 13 and 14.
	Over level land.
12.00	Begin abrupt ascent over rocky and mountainous land, bearing NE. and SW.
18.00	Spur, projects NE. Descend.
28.90	Hollow, 50 ft. deep, course NE. Ascend.
30.50	Spur, projects NE. Abrupt descent.
36.00	Enter level land, bearing E. and W. Through sparse undergrowth.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on W. half, S 13 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
47.50	Wash, 20 lks. wide, 5 ft. deep, course SE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked on brass cap, T 19 S S 11 in NW., R 10 E S 12 in NE., S 13 in SE. and S 14 in SW. quadrant, dig pits, 18x18x12 ins.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth,
4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and level.

Soil, loam, 1st. and 2nd. rate on 56.00 chs.

balance, rocky, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 24.00 chs.

S. $89^{\circ}59'$ E., on a random line, bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.12 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs.
7-12-13 and 18, heretofore described.

Thence I run

S. $89^{\circ}59'$ W., on a true line,

Bet. secs. 12 and 13.

Gradual descent over rolling land, through sparse
undergrowth.

33.00 Wash, 15 lks. wide, 4 ft. deep, course SW.

Over level land, bears NE. and SW.

40.06 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 12 on N.
half, S 13 on S. half, dig pits, 18x18x12 ins., E. and W. of
post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor.

67.00 Wash, 10 lks. wide, 4 ft. deep, course S.

80.12 The cor. of secs. 11-12-13 and 14.

Land, rolling and level.

Soil, loam, 1st. and 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	N.0°01'W., bet. secs. 11 and 12. Over level land, through sparse undergrowth.
10.10	Road from Green River to Castledale, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on W. half, S 12 on E. half, dig pits, 18x18x12 ins., N. and S. of post, ^{3 ft. dist.} and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked on brass cap T. 19 S S 2' in NW., R 10 E S 1' in NE., S 12 in SE. and S 11 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, level. Soil, loam, 1st. rate. No timber. Undergrowth, shad scale and sage brush.
	N.89°59'E., on a random line, bet. secs. 1 and 12.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.10	Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described. Thence I run S.89°58'W., on a true line, bet. secs. 1 and 12. Over level land, through sparse undergrowth.
40.05	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 1 on N. half, S 12 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist. and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
74.50	Wash, 15 lks. wide, 5 ft. deep, course S.
80.10	The cor. of secs. 1-2-11 and 12. Land, level. Soil, loam, 1st. rate.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

No timber.

Undergrowth, shad scale and sage brush.

N.0°01'W., on a random line, bet. secs.1 and 2.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

84.94 Intersect N. bdy. of Tp., 3 lks. E. of the re-established cor. of secs. 1-2-35 and 36, heretofore described.

Thence I run

S.0°02'E., on a true line,

Bet. secs. 1 and 2.

Descend along west slope over solid sandstone ledges.

9.25 Begin abrupt descent over nearly perpendicular sandstone ledges, bearing NW. and SE.

30.00 Foot of ledges, bears NW. and SE., 400 ft. below top. Descend abruptly over rocky land.

31.00 Leave rocky land, bears NW. and SE.

Over level land, through sparse undergrowth.

44.94 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 on W. half, S 1 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

46.00 Road, from Green River to Huntington, bears NW. and SE.

84.94 The cor. of secs. 1-2-11 and 12.

Land, mountainous and level.

Soil, rocky, 4th. rate on 31.00 chs.

balance, loam, 1st. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land 31.00 chs. November 16, 1910.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

	<p>November 17: At 7h.45m., a.m., l.m.t., I set off $39^{\circ}07'N$. on lat.arc, $18^{\circ}48'S$. on decl.arc, and determine a meridian with the solar at the cor.of secs.2-3-34 and 35, heretofore described, on S.bdy.of Tp.</p> <p>Thence I run</p> <p style="padding-left: 40px;">$N.0^{\circ}01'W$., bet.secs.34 and 35.</p> <p>Ascend over rolling and rocky land, through scattering timber.</p>
2.00	<p>Spur, projects NW.</p> <p>Descend.</p>
7.00	<p>Head of hollow, course NW.</p> <p>Ascend.</p>
10.25	<p>Ridge, bears NW. and SE.</p> <p>Descend.</p>
35.00	<p>Hollow, 50 ft. deep, course NW.</p> <p>Ascend.</p>
38.00	<p>Spur, projects NW.</p> <p>Descend.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on W. half, S 35 on E. half, from which</p> <p style="padding-left: 40px;">A cedar, 12 ins. dia., bears $S.67^{\circ}E$., 33 lks. dist., marked $\frac{1}{4}$ S 35 BT.</p> <p style="padding-left: 40px;">A cedar, 6 ins. diam., bears $N.44^{\circ}W$., 48 lks. dist., marked $\frac{1}{4}$ S 34 BT.</p>
41.25	<p>Hollow, 40 ft. deep, course NW.</p> <p>Ascend.</p>
42.75	<p>Ridge, bears NW. and SE.</p> <p>Descend.</p>
50.00	<p>Leave timber.</p>
70.00	<p>Enter scattering timber.</p>
76.50	<p>Hollow, 50 ft. deep, course NW.</p> <p>Ascend.</p>
80.00	<p>On top of spur, projects SW.</p>

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked on brass cap, T 19 S S 27 in NW.,
 R 10 E S 26 in NE.,
 S 35 in SE. and S 34 in SW. quadrant, from which

A cedar, 8 ins. diam., bears N. 67° E., 140 lks. dist., marked T 19 S R 10 E S 26 BT.

A cedar, 5 ins. diam., bears S. 59° E., 130 lks. dist., marked T 19 S R 10 E S 35 BT.

A cedar, 12 ins. diam., bears S. 31° W., 59 lks. dist., marked T 19 S R 10 E S 34 BT.

A cedar, 8 ins. diam., bears N. 14° W., 124 lks. dist., marked T 19 S R 10 E S 27 BT.

Land, rolling.
 Soil, rocky, 3rd. rate.
 Timber, cedar and pinon.

S. 89° 58' E. on random line, bet. secs. 26 and 35.

40.00
 80.06
 4.00
 30:00
 35.00
 39.00

Set temp. 1/4 sec. cor.

Intersect N. and S. line, 3 lks. N. of the cor. of secs. 25-26-35 and 36.

Thence I run
 N. 89° 57' W., on a true line,
 Bet. secs. 26 and 35.

Descend over rocky and rolling land, through scattering timber.

Hollow, 50 ft. deep, course NW.

Ascend.

Ridge, bears NW. and SE.

Descend.

Hollow, 50 ft. deep, course S.

Ascend.

Spur, projects S.

Descend.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
40.03	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on N. half, S 35 on S. half, from which</p> <p style="padding-left: 40px;">A cedar, 5 ins. diam., bears N. 49° W., 28 lks. dist., marked $\frac{1}{4}$ S 26 BT.</p> <p style="padding-left: 40px;">A cedar, 9 ins. diam., bears S. 30° 30' E., 53 lks. dist., marked $\frac{1}{4}$ S 35 BT.</p>
58.90	Wash, 50 lks. wide, 5 ft. deep, course SW.
60.80	Same wash, 50 lks. wide, 5 ft. deep, course NW.
64.00	<p>Same wash, 50 lks. wide, 5 ft. deep, course SW.</p> <p>Gradual ascent over rolling land.</p>
80.06	<p>The cor. of secs. 26-27-34 and 35.</p> <p>Land, rolling.</p> <p>Soil, rocky, 3rd. rate.</p> <p>Timber, cedar and pinon.</p>
14.00	<p style="text-align: center;">N. 0° 01' W., bet. secs. 26 and 27.</p> <p>Descend over rocky land, through scattering timber.</p> <p>Hollow, 50 ft. deep, course NW.</p> <p>Ascend.</p>
19.90	<p>Gypsum spur, projects W.</p> <p>Descend.</p>
22.00	<p>Hollow, 50 ft. deep, course W.</p> <p>Leave timber.</p> <p>Ascend.</p>
26.20	<p>Spur, projects W.</p> <p>Descend.</p>
39.30	<p>Hollow, 50 ft. deep, course W.</p> <p>Ascend.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 27 on W. half, S 26 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p> <p>Pits impracticable.</p>
42.00	Spur, projects W.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	Descend over broken gypsum land.
73.00	Hollow, 50 ft. deep, course W. Ascend.
74.00	Ridge, bears NW. and SE. Descend.
78.00	Hollow, 50 ft. deep, course NW. Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked on brass cap, T 19 S S 22 in NW., R 10 E S 23 in NE., S 26 in SE. and S 27 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor. Land, rolling. Soil, rocky and gypsum, 3rd. rate. Timber, cedar and pinon.
	----- S. 89°57'E., on a random line, bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 23-24-25 and 26. Thence I run N. 89°56'W., on a true line, Bet. secs. 23 and 26. Descend over rocky land, through scattering timber.
4.75	Hollow, 50 ft. deep, course NW. Ascend.
8.00	Spur, projects NW. Descend.
19.00	Hollow, 50 ft. deep, course NE. Ascend.
24.50	Spur, projects N. Descend.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 28.00 Leave timber.
- 35.50 Hollow, 50 ft. deep, course NE.
Ascend.
- 40.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on N. half, S 26 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 63.00 Ridge, bears N. and S.
Descend.
- 80.04 The cor. of secs. 22-23-26 and 27.
Land, rolling.
Soil, rocky and gypsum, 3rd. rate.
Timber, cedar and pinon.
-
- N. 0°01' W., bet. secs. 22 and 23.
- 40.00 Descend over rolling land, through sparse undergrowth.
Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on W. half, S 23 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 67.60 Old wood road, bears NW. and SE.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground for cor. of secs. 14-15-22 and 23, marked on brass cap,
T 19 S S 15 in NW.,
R 10 E S 14 in NE.,
S 23 in SE. and S 22 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, rolling.
Soil, gypsum and loam, 2nd. and 3rd. rate.
No timber; Undergrowth, shad scale and sage brush.
November 17: At this cor. I set off $18^{\circ}54'$ S. on decl. arc,

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

and at 11h.45m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}10'N$.

S. $89^{\circ}56'E$, on a random line, bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

N. $89^{\circ}58'W$, on a true line,

Bet. secs. 14 and 23.

Ascend over rolling land, through sparse undergrowth.

7.00 Begin abrupt ascent over rocky land, bearing NE. and SW.

11.00 Ridge, bears NE. and SW.

Descend over rolling land, along rocky north slope.

27.00 Hollow, 30 ft. deep, course N.

Ascend.

31.00 Spur, projects N.

Descend.

40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on N. half, S 23 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

50.00 Hollow, 25 ft. deep, course N.

Ascend over rolling land, along north slope.

80.02 The cor. of secs. 14-15-22 and 23.

Land, rolling and mountainous.

Soil, rocky loam, 2nd. and 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	N.0°01'W., bet. secs. 14 and 15.
	Descend over rolling land, through sparse undergrowth.
30.00	Enter level land, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on W. half, S 14 on E. half, dig pits, 18x18x12 ins., N. and S. of post, and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
48.50	Wash, 20 lks. wide, 5 ft. deep, course NE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked on brass cap, T 19 S S 10 in NW., R 10 E S 11 in NE., S 14 in SE. and S 15 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor. Land, rolling and level. Soil, loam, 1st. and 2nd. rate. No timber. Undergrowth, shad scale and sage brush.
	S.89°58'E., on a random line, bet. secs. 11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 11-12-13 and 14.
	Thence I run
	West, on a true line, bet. secs. 11 and 14.
	Over level land, through sparse undergrowth.
8.00	Sand ridge, 10 ft. high, bears NW., 5.00 chs. and SE. 5.00 chs.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on N. half, S 14 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
79.40	Wash, 50 lks. wide, 4 ft. deep, course SE.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

80.00 The cor.of secs.10-11-14 and 15.

Land.level.

Soil,sandy and loam,1st.and 2nd.rate.

No timber.

Undergrowth,shad scale and sage brush.

N.0°01'W.,bet.secs.10 and 11.

Over level land,through sparse undergrowth.

0.50 Enter wash,50 lks.wide,4 ft.deep,course from N.to SE.

Along wash.

15.50 Leave wash,course from NW.to S.

16.70 Road from Green River to Castledale,bears E.and W.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for 1/4 sec.cor.,marked on brass cap,1/4 S 10 on W.half,S 11 on E.half,dig pits,18x18x12 ins.,N.and S.of post,3 ft.dist.,and raise a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.

46.00 Road,bears NW.and SE.

80.00 Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.2-3-10 and 11,marked on brass cap,T 19 S S 3 in NW., R 10 E S 2 1/2 in NE., S 11 in SE.and S 10 in SW.quadrant,dig pits,18x18x12 ins.in each sec.,5 1/2 ft.dist.,and raise a mound of earth 4 ft.base,2 ft.high,W.of cor.

Land,level.

Soil,loam,1st.rate.

Timber,cedar and pinon.

Undergrowth,shad scale and sage brush.

East,on a random line,bet.secs.2 and 11.

40.00 Set temp.1/4 sec.cor.

79.98 Intersect N.and S.line,3 lks.S.of the cor.of secs. 1-2-11 and 12.

SUBDIVISIONS OF T.19 S., R.10 E.

DHAIBS	
39.99	<p>Thence I run</p> <p style="text-align: center;">S. 89°59' W., on a true line,</p> <p style="text-align: center;">Bet. secs. 2 and 11.</p> <p>Over level land, through sparse undergrowth.</p> <p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 on N. half, S 11 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.</p>
51.00	<p>Wash, 15 lks. wide, 4 ft. deep, course S.</p>
79.98	<p>The cor. of secs. 2-3-10 and 11.</p> <p>Land, level.</p> <p>Soil, sandy loam, 1st. rate.</p> <p>No timber.</p> <p>Undergrowth, shad scale and sage brush.</p>
40.00	<p style="text-align: center;">N. 0°01' W., on a random line, bet. secs. 2 and 3.</p> <p>Set temp. $\frac{1}{4}$ sec. cor.</p>
84.99	<p>Intersect N. bdy. of Tp., 7 lks. E. of the re-established cor. of secs. 2-3-34 and 35, heretofore described.</p> <p>Thence I run</p> <p style="text-align: center;">S. 0°04' E., on a true line,</p> <p style="text-align: center;">Bet. secs. 2 and 3.</p> <p>Over level land, through sparse undergrowth.</p>
13.00	<p>Road from Green River to Huntington, bears NW. and SE.</p>
44.99	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 on W. half, S 2 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p>
84.99	<p>The cor. of secs. 2-3-10 and 11.</p> <p>Land, level.</p> <p>Soil, sandy loam, 1st. rate.</p> <p>No timber; Undergrowth, shad scale and sage brush.</p>

November 17, 1910

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

November 18: At 7h.45m., a.m., l.m.t., I set off $39^{\circ}07'N$.
on lat.arc, $19^{\circ}03'S$. on decl.arc, and determine a meridian
with the solar at the cor. of secs. 3-4-33 and 34,
heretofore described on the S.bdy. of the Tp¹

Thence I run

$N.0^{\circ}02'W$. bet. secs. 33 and 34.

Descend over rolling land, through sparse undergrowth.

18.00 Hollow, 60 ft. deep, course NW.

Ascend.

24.00 Spur, projects NW.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 33 on W.
half, S 34 on E. half, dig pits, 18x18x12 ins., N. and S. of
post, 5 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, W. of cor.

49.50 Hollow, 50 ft. deep, course NW.

Ascend.

56.00 Ridge, bears NW. and SE.

Descend.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
ground, for cor. of secs. 27-28-33 and 34, marked on brass
cap, T 19 S S 28 in NW.,

R 10 E S 27 in NE.,

S 34 in SE. and S 33 in SW. quadrant, and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, rocky and gypsum, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	S. $89^{\circ}58'1E$. on random line, bet. secs. 27 and 34.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect N. and S. line, 1 lk. N. of the cor. of secs. 26-27-34 and 35.
	Thence I run
	N. $89^{\circ}58'1W$., on a trueline,
	Bet. secs. 27 and 34.
	Descend over rocky land, through scattering timber.
3.00	Hollow, 50 ft. deep, course NW.
	Ascend.
6.00	Spur, projects N.
	Descend.
10.00	Hollow, 50 ft. deep, course NW.
	Ascend.
28.60	Ridge, bears NW. and SE.
	Descend.
39.50	Hollow, 40 ft. deep, course NW.
	Ascend.
39.96	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, marked on brass cap, $\frac{1}{4}$ S 27 on N. half, S 34 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
40.60	Spur, projects NW.
	Descend.
47.00	Same hollow, 50 ft. deep, course SW.
	Ascend.
55.00	Spur, projects SW.
	Descend.
60.00	Hollow, 50 ft. deep, course NW.
	Ascend.
71.00	Ridge, bears NW. and SE.
	Descend.
78.00	Hollow, 50 ft. deep, course NW.
	Ascend.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 79.92 The cor. of secs. 27-28-33 and 34.
 Land, rolling.
 Soil, rocky and gypsum, 3rd. rate.
 Timber, cedar and pinon.
-
- N. 0° 02' W., bet. secs. 27 and 28.
- Descend over rolling land.
- 3.00 Hollow, 50 ft. deep, course NW.
 Ascend.
- 5.00 Spur, projects NW.
 Descend.
- 18.00 Hollow, 50 ft. deep, course NW.
 Ascend.
- 27.00 Spur, projects NW.
 Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 28 on W.
 half, S 27 on E. half, dig pits, 18x18x12 ins., N. and S. of
 post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, W. of cor.
- 48.00 Hollow, 50 ft. deep, course NW.
 Ascend.
- 78.00 Spur, projects NW.
 Descend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
 ground, for cor. of secs. 21-22-27 and 28, marked on brass
 cap, T 19 S S 21 in NW.,
 R 10 E S 22 in NE.,
 S 27 in SE. and S 28 in SW. quadrant, dig pits, 18x18x12
 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth
 4 ft. base, 2 ft. high, W. of cor.
 Land, rolling.
 Soil, rocky and gypsum, 3rd. rate.
 No timber. Undergrowth shedscale and sagebrush.
-

SUBDIVISIONS OF T.19 S., R.9 E.

CHAINS	
	S.89°58'E., on a random line, bet. secs. 22 and 27.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 22-23-26 and 27.
	Thence I run
	N.89°59'W., on a true line,
	Bet. secs. 22 and 27.
	Descend over rolling land, through sparse undergrowth.
0.75	Hollow, 50 ft. deep, course NW.
	Ascend.
4.00	Spur, projects NW.
	Descend.
11.00	Head of hollow, course NE.
	Ascend.
26.00	Ridge, bears NW. and SE.
	Descend.
39.97	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on N. half, S 27 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
48.00	Hollow, 35 ft. deep, course NW.
	Ascend.
67.00	Ridge, bears NW. and SE.
	Descend.
79.00	Head of hollow, course NW.
	Ascend.
79.94	The cor. of secs. 21-22-27 and 28.
	Land, rolling.
	Soil, gypsum, 3rd. rate.
	No timber.
	Undergrowth, shad scale and sage brush.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

N.0°02'W., bet. secs. 21 and 22.

Descend over gypsum hills through sparse undergrowth.

2.50 Hollow, 50 ft. deep, course NW.

Ascend.

15.00 Ridge, bears NW. and SE.

Descend over rolling land.

21.00 Wash, 100 lks. wide, 25 ft. deep, course NW.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 21 on W. half, S 22 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

70.00 Hollow, 50 ft. deep, course SW.

Ascend.

80.00 On top of low spur, projects SW.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked on brass cap, T 19 S S 16 in NW.,

R 10 E S 15 in NE.,

S 22 in SE. and S 21 in SW. quadrant, dig pits, 18x18x12 ins., in each cor., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, gypsum and rocky, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

November 18: At this cor. I set off 19°08'S. on decl. arc, and at 11h. 45m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°10'N.

S. 89°59'E., on a random line, bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.90 Intersect N. and S. line, 7 lks. S. of the cor. of secs.

14-15-22 and 23.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	<p>Thence I run S.89°58'W., on a true line, Bet. secs. 15 and 22.</p>
30.50	<p>Ascend over rolling land, through sparse undergrowth. Old wood road, bears NW. and SE.</p>
39.95	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on N. half, S 22 on S. half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.</p>
48.00	<p>Low ridge, bears NW. and SE. Descend.</p>
55.75	<p>Hollow, 30 ft. deep, course SW. Ascend.</p>
58.00	<p>Spur, projects SW. Descend.</p>
75.00	<p>Head of hollow, course S. Ascend.</p>
79.90	<p>The cor. of secs. 15-16-21 and 22. Land, rolling. Soil, thin layer of loam over gypsum, 3rd. rate. No timber. Undergrowth, shad scale and sage brush.</p>
	<p style="text-align: center;">N.0°02'W., bet. secs. 15 and 16.</p>
27.85	<p>Descend over rolling land, through sparse undergrowth. Hollow, 50 ft. deep, course SW. Ascend.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 16 on W. half, S 15 on E. half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.</p>
72.00	<p>Ridge, bears W. and SE. From this point the north east corner of a square top mes</p>

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

100 ft. higher than the surrounding country, bears west, 10. chs. dist.

From the NE. cor. the square top ^{mesa} bears W., 10.00 chs. and S., 10.00 chs. dist.

Descend.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked on brass cap, T 19 S S 9 in NW., R 10 E S 10 in NE., S 15 in SE. and S 16 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, rocky and gypsum, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

N. $89^{\circ}58'$ E., on a random line, bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.88 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 10-11-14 and 15.

Thence I run

N. $89^{\circ}59'$ W., on a true line

Bet. secs. 10 and 15.

Over level land, through sparse undergrowth.

39.94 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 10 on N. half, S 15 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

40.25 Wash, 25 lks. wide, 5 ft. deep, course SE.

60.10 Old wood road, bears NW. and SE.

Begin ascent over rolling land, bears NW. and SE.

79.88 The cor. of secs. 9-10-15 and 16.

SUBDIVISIONS OF T.19 S. R.10 E.

CHAINS

Land, level and rolling.
 Soil, loam, 1st. and 2nd. rate.
 No timber.
 Undergrowth, shad scale and sage brush.

N. 0° 02' W., bet. secs. 9 and 10.

- Descend over rolling land, through sparse undergrowth.
- 6.50 Old wood road, bears NW. and SE.
- 11.00 Wash, 15 lks. wide, 4 ft. deep, course E.
 Enter level land, bears E. and W.
- 12.06 Road from Green River to Castledale, bears E. and W.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 9° on W. half, S 10° on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 48.00 Begin ascent over rolling land, bears E. and W.
- 62.00 Begin abrupt ascent, over rocky land, bears NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 3-4-9 and 10, marked on brass cap, T 19 S S 4 in NW.,
 R 10 E S 3 in NE.,
 S 10 in SE. and S 9 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
- Note:
 On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.
- Land, rolling and level.
 Soil, loam, 1st. and 2nd. rate on 62.00 chs.
 balance, thin layer of sand over solid sandstone ledges, 4th. rate.
 No timber.
 Undergrowth, shad scale and sage brush.
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SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- S.89°59'E., on a random line, bet. secs. 3 and 10.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.84 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 2-3-10 and 11.
- Thence I run
- N.89°58'W., on a true line,
- Bet. secs. 3 and 10.
- Over level land, through sparse undergrowth.
- 22.20 Road, bears NW. and SE.
- 33.40 Wash, 50 lks. wide, 5 ft. deep, course SE.
- 39.92 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 on N. half, S 10 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 51.00 Begin abrupt ascent over rocky land, bears NW. and SE.
- 54.00 Top of abrupt ascent bears N. and S.
- Ascend over rocky land, along south slope.
- 79.84 The cor. of secs. 3-4-9 and 10.
- Land, level, rolling and mountainous.
- Soil, loam, 1st. rate on 51.00 chs.
- balance, rocky, 3rd. and 4th. rate.
- No timber.
- Mountainous land on 3.00 chs.
-
- N.0°02'W., on a random line, bet. secs. 3 and 4.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 85.01 Intersect N. bdy. of Tp., 12 lks. E. of the re-established cor. of secs. 3-4-33 and 34, heretofore described.
- Thence I run
- S.0°07'E., on a true line,
- Bet. secs. 3 and 4.
- Over level land, through sparse undergrowth.
- 9.16 Road, bears NW. and SE.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

- 31.40 Wash, 35 lks. wide, 9 ft. deep, course SE.
- 45.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 4 on W. half, S 3 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 64.00 Begin ascent over rolling and rocky land, bears NW. and SE.
- 82.00 Spur projects E.
Descend.
- 85.01 The cor. of secs. 3-4-9 and 10.
Land, level and rolling.
Soil, loam, 1st. rate on 64.00 chs.
balance, rocky, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
- November 18, 1910
-
- November 19: At 7h. 45m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $19^{\circ}17'S.$ on decl. arc, and determine a meridian with the solar at the cor. of secs. 4-5-32 and 33, heretofore described on the S. bdy. of the Tp.
Thence I run
N. $0^{\circ}03'W.$, bet. secs. 32 and 33.
Descend over rolling gypsum hills, through sparse undergrowth.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on W. half, S 33 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 55.00 Hollow, 50 ft. deep, course W.
Ascend.
- 61.00 Ridge, bears NE. and SW.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

Descend.

- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked on brass cap, T 19 S S 29 in NW.,
R 10 E S. 28 in NE.,
S 33 in SE. and S 32 in SW. quadrant, dig pits, 18x18x12 ins in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, rolling.
Soil, gypsum, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.

S. 89°58'E, on random line, bet. secs. 28 and 33.

- 40.00 Set temp. ¼ sec. cor.
79.90 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 27-28-33 and 34.
Thence I run
N. 89°59' W., on a true line,
Bet. secs. 28 and 33.
Ascend over gypsum hills, through sparse undergrowth.

- 0.60 Spur, projects N.
Descend.
4.00 Hollow, 50 ft. deep, course N.
Ascend.
9.00 Ridge, bears NW. and SE.
Descend over rolling land.
39.95 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ¼ S 28 on N. half, S 33 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
79.90 The cor. of secs. 28-29-32 and 33.
Land, rolling.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

Soil, gypsum, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

N.0°03'W., bet. secs. 28 and 29.

Descend over gypsum hills, through sparse undergrowth.

6.00 Wash, 100 lks. wide, 15 ft. deep, course NW.

23.00 Wash, 150 lks. wide, 25 ft. deep, course NW.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 29 on W. half, S 28 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

62.25 Wash, 150 lks. wide, 20 ft. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked on brass cap, T 19 S S 20 in NW.,

R 10 E S 21 in NE.,

S 28 in SE. and S 29 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, gypsum, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

S.89°59'E., on a random line, bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 21-22-27 and 28.

Thence I run

N.89°58'W., on a true line,

Bet. secs. 21 and 28.

Ascend over gypsum hills, through sparse undergrowth.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 6.00 Spur, projects NW.
Descend.
 - 13.00 Hollow, 50 ft. deep, course NW.
Ascend.
 - 18.00 Spur, projects NW.
Descend.
 - 38.00 Head of hollow, course W.
Descend in bottom of hollow.
 - 39.99 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 21 on N. half, S 28 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 - 53.00 Leave hollow, 30 ft. deep, course from E. to NW.
Ascend.
 - 59.00 Spur, projects NW.
Descend over rolling land.
 - 79.98 The cor. of secs. 20-21-28 and 29.
Land, rolling.
Soil, gypsum, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
-
- N. 0° 03' W., bet. secs. 20 and 21.
- 14.50 Descend over gypsum hills, through sparse undergrowth.
Hollow, 50 ft. deep, course SE.
Ascend over rolling, sandy land.
 - 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 20 on W. half, S 21 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 - 54.00 Begin abrupt ascent over sandstone ledges, bearing NE. and SW.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
63.00	Sandstone spur, 150 ft. above $\frac{1}{4}$ sec. cor., projects E. Descend along steep, east slope over broken sandstone ledges.
71.00	Bottom of descent on east slope, 100 ft. below spur. Begin abrupt ascent along steep, east slope, over sandstone ledges.
79.50	Top of perpendicular sandstone ledge, 50 ft. high, bears NE. and SW. Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 16-17-20 and 21, marked on brass cap, T 19 S S 17 in NW.,
	R 10 E S 16 in NE.,
	S 21 in SE. and S 20 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
	Note: On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.
	Land, rolling and mountainous.
	Soil, gypsum and sandy, 3rd. rate, on 54.00 chs. balance, rocky, 4th. rate.
	No timber.
	Undergrowth, shad scale and sage brush.
	Mountainous land on 26.00 chs.
	November 19: At this cor. I set off $19^{\circ}23'$ S. on decl. arc, and at 11h. 45m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}10'N$.
	S. $89^{\circ}58'E$., on a random line, bet. secs. 16 and 21.
40.00	Set temp. $\frac{1}{2}$ sec. cor.
79.94	Intersect N. and S. line, at the cor. of secs. 15-16-21 and 22. Thence I run N. $89^{\circ}58'W$., on a true line,

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

Bet. secs. 16 and 21.

- Descend over rolling land, through sparse undergrowth.
- 15.90 Hollow, 50 ft. deep, course SW.
Ascend.
- 39.97 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 16 on N. half, S 21 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 67.00 Begin ascent over clay hills, bearing N. and SW.
- 77.00 Begin abrupt ascent over sandstone ledges, bearing NE. and SW.
- 79.70 Top of perpendicular sandstone ledge, 50 ft. high, bears NE. and SW.
Ascend.
- 79.94 The cor. of secs. 16-17-20 and 21.
Land, rolling and mountainous.
Soil, sandy and clay, 3rd. rate on 77.00 chs.
balance, rocky, 4th. rate.
No timber.
Undergrowth, shad scale and sage brush.
Mountainous land on 2.94 chs.
-
- N. 0° 03' W., bet. secs. 16 and 17.
- Ascend abruptly over broken sandstone ledges, along steep, east slope.
- 3.45 Top of ledges, bearing NE. and SW.
Ascend.
- 7.50 Ridge, bears NE. and SW.
Descend over rolling land, through sparse undergrowth.
- 33.00 Begin abrupt descent over broken sandstone ledges, bearing NW. and SE.
- 35.00 Foot of abrupt descent, bears NW. and SE.
Over solid sandstone, gradual descent.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 40.00 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 17 on W. half, S 16 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
Note:
On account of natural obstacles it is impossible to set this post in the ground.
- 40.50 Begin abrupt ascent over sandstone ledges, bearing NE. and SW.
- 43.00 Top of ledges, bearing NE. and SW.
Begin descent over broken sandstone ledges.
- 46.00 Leave rocky land.
Descend over rolling, sandy land.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked on brass cap, T 19 S S 8 in NW.,
R 10. E S 9 in NE.,
S 16 in SE. and S 17. in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
Land, mountainous and rolling.
Soil, rocky, 3rd. and 4th. rate on 13.45 chs.
balance, sandy and sandy loam, 2nd. and 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
Mountainous land on 13.45 chs.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

S.89°58'E., on a random line, bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect N. and S. line, 3 lks. S. of the cor. of secs.
9-10-15 and 16.

Thence I run

N.89°59'W., on a true line,

Bet. secs. 9 and 16.

Gradual ascent over rolling land, along north slope,
through sparse undergrowth.

33.00 Enter rocky land, bears NW. and SE.

35.15 Begin abrupt ascent over broken sandstone ledges,
bearing N. and S.

37.55 Top of rocky knoll, 100 ft. high, on line.
Abrupt descent.

39.96 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone
and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 9 on
N. half, S 16 on S. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

Note:

On account of natural obstacles it is impossible
to set this post over 10 ins. in the ground.

40.50 Foot of abrupt descent, bears N. and S.

Gradual ascent over solid sandstone.

47.00 Begin abrupt ascent over broken ledges, bearing NW. and SE.

50.00 Top of abrupt ascent, bears NW. and SE., 75 ft. high.

Gradual descent over rolling sandy land.

79.92 The cor. of secs. 8-9-16 and 17.

Land, rolling and mountainous.

Soil, sandy loam, 2nd. rate on 62.92 chs.

balance, rocky, 4th. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 8.35 chs.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	N.0°03'W., bet. secs. 8 and 9.
	Descend over rolling land, through sparse undergrowth.
12.00	Enter level land, bears E. and W.
24.90	Road from Green River to Castle Dale, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 8 on W. half, S 9 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked on brass cap, T 19 S S 5 in NW., R 10 E S 4 in NE., S 9 in SE. and S 8 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and level. Soil, sandy and rocky loam, 1st. and 2nd. rate. No timber. Undergrowth, shad scale and sage brush.
	S.89°59'E., on a random line, bet. secs. 4 and 9.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 3-4-9 and 10. Thence I run West, on a true line, bet. secs. 4 and 9. Over rocky and mountainous land, ascend along south slope, through sparse undergrowth.
5.00	Sandstone spur, projects S. Descend.
18.00	Hollow, 75 ft. deep, course S. Ascend.
27.00	Rocky spur, projects S.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- Abrupt descent.
- 33.00 Hollow, 75 ft. deep, course S.
Abrupt ascent.
- 39.95 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 4 on N. half, S 9 on S. half, and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 40.25 Rocky spur, projects S.
Abrupt descent.
- 44.00 Hollow, 50 ft. deep, course S.
Ascend.
- 51.50 Rocky spur, projects S.
Abrupt descent over broken and rocky land.
- 70.60 Enter level land, bears NW. and SE.
Leave rocky land.
- 79.90 The cor. of secs. 4-5-8 and 9.
Land, mountainous and level.
Soil, rocky, 3rd. and 4th. rate on 70.60 chs.
balance, sandy loam, 2nd. rate.
No timber.
Undergrowth, sage brush and shad scale.
Mountainous land on 70.60 chs.
-
- N. $0^{\circ}03'$ W., on a random line, bet. secs. 4 and 5.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 84.89 Intersect N. bdy. of Tp., 12 lks. E. of the re-established cor. of secs. 4-5-32 and 33, heretofore described.
Thence I run
S. $0^{\circ}08'$ E., on a true line,
Bet. secs. 4 and 5.
Ascend abruptly over rocky and mountainous land, over conglomerate boulders, through scattering timber.

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SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

- 23.00 Ridge, bears E. and W.
Abrupt descent over broken ledges.
- 40.00 Hollow, 200 ft. below top of ridge, course SW.
Ascend along west slope.
- 44.50 Rocky spur, projects SW.
Descend.
- 44.89 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 5 on W.
half, S 4 on E. half, from which
A cedar, 8 ins. diam., bears S. 16° E., 141 lks. dist.,
marked $\frac{1}{4}$ S 4 BT.
No other trees within limits and raise a mound of stone,
2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 46.00 Hollow, 75 ft. deep, course SW.
Abrupt ascent.
- 51.00 Rocky spur, projects SW.
Abrupt descent.
- 74.00 Foot of abrupt descent, bears E. and W.
Descend over rocky land.
- 75.50 Leave timber and rocky land, bears E. and W.
Over level land, through sparse undergrowth.
- 84.89 The cor. of secs. 4-5-8 and 9.
Land, mountainous, rolling and level.
Soil, rocky, 3rd. and 4th. rate on 75.50 chs.
; balance, loam, 2nd. rate.
Timber, cedar and pinon.
Undergrowth, shad scale and sage brush.
Mountainous land on 74.00 chs.

November 19, 1910

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	November 20: At 7h.46m., a.m., l.m.t., I set off 39°07'N.
	on lat. arc, 19°31'S., on decl. arc, and determine a
	meridian with the solar at the cor. of secs. 5-6-31 and
	32, heretofore described on the S. bdy. of the Tp.
	Thence I run
	N. 0°03'W., bet. secs. 31 and 32.
	Descend over gypsum hills.
5.00	Head of hollow, course SW.
	Ascend.
10.40	Ridge, bears NE. and SW.
	Descend over broken gypsum hills.
36.50	Hollow, 75 ft. deep, course W.
	Ascend.
39.00	Spur, projects SW.
	Descend.
39.80	Hollow, 40 ft. deep, course SW.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
	ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 31 on W.
	half, S 32 on E. half, and raise a mound of stone, 2 ft.
	base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
43.90	Spur, projects SW.
	Descend.
61.00	Hollow, 50 ft. deep, course SW.
	Ascend.
69.20	Ridge, bears NE. and SW.
	Descend.
79.25	Hollow, 50 ft. deep, course NW.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
	ground, for cor. of secs. 29-30-31 and 32, marked on brass
	cap, T 19 S S 30 in NW.,
	R 10 E S 29 in NE.,

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

S 32 in SE. and S 31 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, gypsum, 3rd. rate.

No timber.

S. $89^{\circ}58'$ E. on random line, bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 28-29-32 and 33.

Thence I run

N. $89^{\circ}59'$ W., on a true line,

Bet. secs. 29 and 32.

Descend along north slope over broken gypsum hills.

40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 29 on N. half, S 32 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

65.00 Hollow, 50 ft. deep, course NW.

Ascend.

72.00 Ridge, bears NW. and SE.

Descend.

80.06 The cor. of secs. 29-30-31 and 32.

Land, rolling.

Soil, gypsum, 3rd. rate.

No timber.

N. $89^{\circ}58'$ W. on random line, bet. secs. 30 and 31.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

81.32 Intersect W. bdy. of Tp., 1 lk. S. of the cor. of secs. 25-30-31 and 36, heretofore described.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

Thence I run

S.89°58'E., on a true line,

Bet. secs. 30 and 31.

Descend over broken clay hills.

28.00 Leave clay hills, bearing NE. and SW.

Descend over rolling sandy land,

41.32 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on N. half, S 31 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

45.00 Wash, 15 lks. wide, 5 ft. deep, course S.

66.00 Hollow, 75 ft. deep, course SW.

Ascend over gypsum hills.

76.00 Spur, projects NW.

Descend.

80.25 Hollow, 50 ft. deep, course NW.

Ascend.

81.32 The cor. of secs. 29-30-31 and 32.

Land, rolling.

Soil, clay and gypsum, 3rd. and 4th. rate on 43.32 chs.

balance, sandy, 3rd. rate.

No timber.

N.0°03'W., bet. secs. 29 and 30.

Ascend over gypsum.

0.60 Spur, projects W.

Descend over gypsum hills.

16.50 Hollow, 75 ft. deep, course SW.

Ascend over rolling sandy land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on W. half, S 29 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base,

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SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	
	1½ ft. high, W. of cor.
71.00	Begin abrupt ascent over sandstone ledges, bearing NE. and SW.
74.28	Top of perpendicular sandstone ledges, 200 ft. high, bearing NE. and SW. Ascend.
75.50	Ridge, bears NE. and SW. Descend over rocky land.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked on brass cap, T 19 S S 19 in NW., R 10 E S 20 in NE., S 29 in SE. and S 30 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, rolling and mountainous. Soil, gypsum, 3rd. rate on 16.50 chs. sandy, 2nd. rate on 54.50 chs. balance, rocky, 4th. rate. No timber. Mountainous land on 9.00 chs. November 20: At this cor. I set off 19°37'S. on decl. arc, and at 11h. 46m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 39°09'N. <hr style="width: 20%; margin: 10px auto;"/> S. 89°59'E., on a random line, bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
80.08	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 20-21-28 and 29. Thence I run N. 89°57'W., on a true line, Bet. secs. 20 and 29. Descend over rolling gypsum hills.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 10.00 Hollow, 75 ft. deep, course SW.
Ascend over rolling sandy land, through sparse undergrowth.
- 40.04 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 20 on N. half, S29 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 66.00 Begin abrupt ascent over clay hills, bearing NE. and SW.
- 72.00 Begin abrupt ascent over sandstone ledges, bearing NE. and SW.
- 75.50 Top of perpendicular sandstone ledges, 200 ft. high, bearing NE. and SW.
Ascend.
- 76.00 Ridge, bears NE. and SW.
Descend over rocky land, along N. slope.
- 80.08 The cor. of secs. 19-20-29 and 30.
Land, rolling and mountainous.
Soil, gypsum and clay on 16.00 chs. 3rd. rate.
sandy, on 56.00 chs., 2nd. rate.
balance, rocky, 4th. rate.
No timber.
Undergrowth, sage brush and shad scale.
Mountainous land on 14.08 chs.
-
- N. 89°58' W., on a random line, bet. secs. 19 and 30.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 81.23 Intersect W. bdy. of Tp., 3 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.
Thence I run
S. 89°59' E., on a true line,
Bet. secs. 19 and 30.
Ascend over rolling land, through sparse undergrowth.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- 7.20 Spur, projects SW.
Descend.
- 12.00 Hollow, 50 ft. deep, course SW.
Ascend.
- 40.00 Ridge, bears NE. and SW.
Descend.
- 41.23 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19 on N.
half, S 30 on S. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable.
- 41.30 Hollow, heads, 1.00 ch. N., course S.
Ascend.
- 42.50 Rocky spur, projects S.
Descend.
- 46.00 Hollow, 50 ft. deep, course S.
Ascend.
- 47.65 Rocky spur, projects SW.
Descend.
- 49.50 Hollow, 40 ft. deep, course SW.
Ascend over rolling and rocky land.
- 75.00 Ridge, bears NW. and SE.
Descend.
- 79.00 Head of hollow, course NW.
Ascend.
- 81.23 The cor. of secs. 19-20-29 and 30.
Land, rolling.
Soil, rocky, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
-

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

- N. 0°03' W., bet. secs. 19 and 20.
- Descend over rocky and rolling land, through sparse undergrowth.
- 32.00 Hollow, 50 ft. deep, course NW.
- Ascend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19 on W. half, S 20 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Pits impracticable.
- 48.00 Spur, projects NW.
- Descend over rolling sandy land.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked on brass cap, T. 19 S S 18 in NW., R 10 E S 17 in NE., S 20 in SE. and S 19 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
- Land, rolling.
- Soil, rocky and sandy, 3rd. rate.
- No timber.
- Undergrowth, shad scale and sage brush.
-
- S. 89°57' E., on a random line, bet. secs. 17 and 20.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.04 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 16-17-20 and 21.
- Thence I run
- N. 89°59' W., on a true line,
- Bet. secs. 17 and 20.
- Ascend abruptly over sandstone ledges.
- 1.75 Top of perpendicular sandstone ledges, 50 ft. high, bearing NE. and SW.

SUBDIVISIONS OF T.19 S., R.10 E.

TRAILS

- 2.00 Top of sandstone ledges, and ridge, bearing NE. and SW.
Descent over rolling land, through sparse undergrowth.
- 16.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 17 on N.
half, S 26 on S. half, dig pits, 18x18x12 ins., E. and W. of
post, 7 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor.
- 20.04 The cor. of secs. 17-18-19 and 20.
Land, mountainous and rolling.
Soil, rocky, 4th. rate on S. 50 chs.
Balance, sandy loam, 2nd. rate.
No timber.
Undergrowth, shad scale and sage brush.
-
- N. 89° 59' W., on a random line, bet. secs. 18 and 19.
- 20.06 Set temp. $\frac{1}{4}$ sec. cor.
- 21.16 Intersect W. bay. of Tp., 3 lks. S. of the cor. of secs.
18-18-19 and 24.
Thence I run
S. 89° 58' E., on a true line,
Set. sec. 18 and 19.
Ascend over rocky and mountainous land.
- 1.00 Ridge, bears NE. and SW.
Descent.
- 17.00 Hollow, 75 ft. deep, course S.
Abrupt ascent.
- 22.01 Rocky spur, projects S.
Abrupt descent.
- 18.00 Hollow, 50 ft. deep, course S.
Abrupt ascent.
- 21.00 Rocky spur, projects S.
Abrupt descent.
- 22.00 Leave mountainous and rocky land, bears NE. and SW.
Descent over rolling land, through sparse undergrowth.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS

41.16 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 18 on N. half, S 19 on S. half, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pits impracticable.

42.00 Hollow, 50 ft. deep, course SW.

Ascend over rolling land.

81.16 The cor. of secs. 17-18-19 and 20.

Land, mountainous, and rolling.

Soil, rocky, 3rd. rate on 33.00 chs.

balance, sandy loam, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 33.00 chs.

November 20, 1910

November 21: At 7h. 46m., a.m., l.m.t., I set off 39°10' N. on lat. arc, 19°44' S. on decl. arc, and determine a meridian with the solar at the cor. of secs. 17-18-19 and 20.

Thence I run

N. 0°03' W., bet. secs. 17 and 18.

Descend over rolling land, through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 18 on W. half, S 17 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

42.00 Enter level land, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked on brass cap, T 19 S S 7 in NW.,

R 10 E S 8 in NE.,

S 17 in SE. and S 18 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., 5 1/2 ft. dist., and raise a mound of earth

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

4 ft. base, 2 ft. high, W. of cor.

Land, rolling and level.

Soil, sandy loam, 1st. and 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush

S. 89°59'E., on a random line, bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line, 5 lks. S. of the cor. of secs.
8-9-16 and 17.

Thence I run

S. 89°59'W., on a true line;

Bet. secs. 8 and 17.

Descend over rolling land, through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S⁸ on N.
half, S 17 on S. half, dig pits, 18x18x12 ins., E. and W. of
post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor.

41.00 Enter level land, bears NE. and SW.

80.00 The cor. of secs. 7-8-17 and 18.

Land, rolling and level.

Soil, sandy loam, 1st. and 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

S. 89°58'E., on a random line, bet. secs. 7 and 18.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

81.12 Intersect W. bdy. of Tp., 9 lks. S. of the cor. of secs.
7-12-13 and 18, heretofore described.

Thence I run

S. 89°58'E., on a true line,

Bet. secs. 7 and 18.

SUBDIVISIONS OF T.19 S.,R.10 E.

CHAINS	
	Over rocky land, through sparse undergrowth. Descend.
1.75	Hollow, 50 ft. deep, course N.
	Ascend, over rolling land.
41.12	Ridge, bears N. and S.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 7 on N.
	half, S 18 on S. half, dig pits, 18x18x12 ins., E. and W.
	of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft.
	base, $1\frac{1}{2}$ ft. high, N. of cor.
	Descend.
44.50	Hollow, 40 ft. deep, course N.
	Ascend.
57.00	Ridge, bears N. and SW.
	Abrupt descent.
61.00	Enter level land, bears N. and S.
81.12	The cor. of secs. 7-8-17 and 18.
	Land, rolling and level.
	Soil, rocky, 3rd. rate on 61.00 chs.
	balance, loam, 1st. rate.
	No timber.
	Undergrowth, shad scale and sage brush.
	<p style="text-align: center;">-----</p> <p style="text-align: center;">N. 0° 03' W., bet. secs. 7 and 8.</p>
	Over level land, through sparse undergrowth.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 7 on W.
	half, S 8 on E. half, dig pits, 18x18x12 ins., N. and S. of
	post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
	$1\frac{1}{2}$ ft. high, W. of cor.
59.00	Road from Green River to Castledale, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
	ground, for cor. of secs. 5-6-7 and 8, marked on brass cap
	T. 19 S S 6 in NW.,
	R 10 E S 5 in NE.,

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS

S 8 in SE. and S 7 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, level.

Soil, loam, 1st. and 2nd. rate.

No timber.

Undergrowth, sage brush and shad scale.

N. $89^{\circ}59'$ E., on a random line, bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.02 Intersect N. and S. line, at the cor. of secs. 4-5-8 and 9.

Thence I run

S. $89^{\circ}59'$ W., on a true line,

Bet. secs. 5 and 8.

Over level land, through sparse undergrowth.

40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 5 on N. half, S 8 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

50.00 Wash, 100 lks. wide, 5 ft. deep, course S.

59.00 Begin abrupt ascent over rocky land, bears N. and S.

63.00 Top of abrupt ascent, 50 ft. high, bears N. and S.

Over level land.

80.02 The cor. of secs. 5-6-7 and 8.

Land, level and mountainous.

Soil, loam, 1st. and 2nd. rate on 76.02 chs.

balance, rocky, 3rd. rate.

No timber.

Undergrowth, shad scale and sage brush.

Mountainous land on 4.00 chs.

November 21: At this cor. I set off $19^{\circ}50'$ S. on decl. arc, and at 11h. 46m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}11'$ N.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS	N.89°58'W., on a random line, bet. secs. 6 and 7.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
81.08	Intersect W. bdy. of Tp., 12 lks. N. of the cor. of secs. 1-6-7 and 12, heretofore described.
	Thence I run
	N.89°57'E., on a true line,
	Bet. secs. 6 and 7.
	Descend over rolling land, through sparse undergrowth.
22.00	Enter level land, bears NW. and SE.
41.08	Set an iron post, $\frac{3}{4}$ ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 6 on N. half, S 7 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
46.00	Enter rocky land.
49.00	leave rocky land.
50.85	Road from Green River to Castledale, bears NW. and SE.
81.08	The cor. of secs. 5-6-7 and 8.
	Land, rolling and level.
	Soil, rocky and sandy loam, 1st. and 2nd. rate.
	No timber.
	Undergrowth, shad scale and sage brush.

	N.0°03'W., on a random line, bet. secs. 5 and 6.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
84.80	Intersect N. bdy. of Tp., 14 lks. E. of the re-established cor. of secs. 5-6-31 and 32, heretofore described.
	Thence I run
	S.0°09'E., on a true line,
	Bet. secs. 5 and 6.
	Ascend over rolling and rocky land, through scattering timber.
34.50	Ridge, bears E. and W.
	Abrupt descent. Leave timber.

SUBDIVISIONS OF T.19 S., R.10 E.

CHAINS.

- 44.80 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 6 on W. half, S 5 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
- 53.00 Foot of abrupt descent, bears NW. and SE.
Descend over rolling land.
- 66.50 Enter scattering timber, bears E. and W.
- 69.00 Leave timber. Enter sparse undergrowth.
Leave rocky land.
Enter level land, bears E. and W.
- 84.80 The cor. of secs. 5-6-7 and 8.
Land, mountainous, rolling and level.
Soil, rocky, 3rd. and 4th. rate on 69.00 chs.
balance, loam, 1st. rate.
No timber.
Undergrowth, shad scale and sage brush.
Mountainous land on 18.50 chs.

November 21, 1910

GENERAL DESCRIPTION.

This township lies between the Cedar Mountain and the San Rafael river, the surface is generally rolling ^{on} the southern portion and level on a greater part of the northern portion.

The soil is clay, shale, gypsum or sandstone on the greater portion of the rolling land, while the level land is generally a rich loam, capable of producing crops with irrigation.

The entire township is covered with a sparse growth of desert brush, and a scattering growth of cedar and pinon timber is found in the SE. and NW. portions.

GENERAL DESCRIPTION OF T.19 S.,R.10 E.

The roads leading from Green River to Castledale and
Huntington, cross this township.

There is no surface water in this township.

There are ^{no} settlers nor improvements in this township.

There are no indications of oil, coal or minerals found
in this township.

Lawrence D. Feist
U.S. Deputy, Surveyor

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, *Chainman.*

A list of names and final oath of assistants see book "K" _____, *Chainman.*

P. 19 S., R. 11 E. _____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____ meridian, _____ of _____, which are represented

the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 19 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of _____ day of _____, 19____, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of deputy see book "K" T. 19 S. R. 11 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan. 23, 1912

The foregoing field notes of the survey of _____ the subdivisional lines of Township No. 19 South, Range No. 10 East of the Salt Lake Base and Meridian, Utah,

executed by _____ Harvey D. Heist and Walter A. Stumm
under ~~his~~ ^{their} contract No. _____ 320, dated _____ May 3, _____, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hill
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-369

" J "

E. J. K.

FIELD NOTES

OF THE SURVEY OF THE

SOUTH, EAST and NORTH BOUNDARIES

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 11 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors

their

Under his Contract No. 320, dated May 3, 1910

Survey commenced November 22, 1910

Survey completed November 25, 1910

South	57941 ✓
East	60484 ✓
North	57870 ✓
<hr/>	
	180295

24 07 79

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chainman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

For preliminary affidavits see book "F" T. 19 S., R. 9 E.

BOOK A-369

INDEX DIAGRAM.

Township 19 south, Range 11 East,

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we are
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____, Chainman

_____, Chainman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment
of corners, according to the instructions given us, to the best of our skill and ability, in the survey

_____, Moundman

_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
and other duties, according to instructions given us, to the best of our skill and ability, in the survey

_____, Axman

_____, Axman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in
survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



SOUTH BOUNDARY OF T.19 S.,R.11 E.

CHAINS

Survey commenced November 22, 1910, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors: then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations of Polaris, I proceed as follows:

At the cor. of Tps. 19 and 20 S., Rs. 10 and 11 E., heretofore described, in approximate latitude $39^{\circ}07'N.$, long, $110^{\circ}47'W.$, I set off $39^{\circ}07'N.$ on lat. arc, $20^{\circ}02'S.$ on decl. arc, and at 3h. 46m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

November 22, 1910

November 23: At 3h. 19m., a.m., l.m.t., I observe Polaris at western elongation in accordance with Manual of Instructions and mark a point in the line thus determined, on a peg, driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7h. 46m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $20^{\circ}11'S.$ on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'11" west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

The magnetic bearing of the true meridian at 8h.30m., a.m. is N.16°45'W., the angle thus determined gives the mag. decl. 16°45'E.

From the Tp. cor. already described, I run
East, bet. secs. 6 and 31.

Ascend over rolling and rocky land, through scattering timber.

39.41 Allowing for convergency.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 31 on N. half, S 6 on S. half, from which

A pinon, 10 ins. diam., bears N. 11° E., 48 lks. dist., marked $\frac{1}{4}$ S 31 BT.

A pinon, 6 ins. diam., bears S. 59° E., 33 lks. dist., marked $\frac{1}{4}$ S 6 BT.

79.41 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 5-6-31 and 32, marked on brass cap
T 19 S S 31 in NW.,

R 11 E S 32 in NE.,

R 11 E S 5 in SE. and

T 20 S S 6 in SW. quadrant, from which

A cedar, 10 ins. diam., bears N. 71° E., 16 lks. dist., marked T 19 S R 11 E S 32 BT.

A cedar, 7 ins. diam., bears S. 66° E., 119 lks. dist., marked T 20 S R 11 E S 5 BT.

A cedar, 6 ins. diam., bears S. 29° W., 47 lks. dist., marked T 20 S R 11 E S 6 BT.

A cedar, 7 ins. diam., bears N. 31° W., 33 lks. dist., marked T 19 S R 11 E S 31 BT.

Land, rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

East, bet. secs. 5 and 32.

Ascend over rocky land, through scattering timber.

2.00

Spur, projects N.

Descend.

5.00

Hollow, 25 ft. deep, course N.

Ascend.

23.75

Begin abrupt descent over sandstone ledges, bearing N. and S.

30.00

Hollow, 100 ft. deep, course N.

Abrupt ascent.

40.00

Rocky spur, projects N.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on N. half, S 5 on S. half, from which

A cedar, 5 ins. diam., bears N. 45° W., 31 lks. dist., marked $\frac{1}{4}$ S 32 BT.

A pinon, 9 ins. diam., bears S. 18° E., 72 lks. dist., marked $\frac{1}{4}$ S 5 BT.

Abrupt descent.

43.00

Hollow, 75 ft. deep, course NW.

Abrupt ascent.

47.20

Rocky ridge, bears N. and S.

Abrupt descent.

71.00

Hollow, 100 ft. deep, course N.

Ascend.

80.00

At base of perpendicular sandstone ledges, bearing NW. and SE.

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-32 and 33, marked on brass cap, T 19 S S 32 in NW.

R 10 E S 33 in NE.,

R 11 E S 4 in SE. and

T 20 S S 5 in SW. quadrant, from which

SOUTH BOUNDARY OF T.19 S.,R.11 E.

CHAINS

A pinon, 14 ins. diam., bears S. 48° W., 61 lks. dist.
marked T 20 S R 11 E S 5 BT.

A pinon, 8 ins. diam., bears N. 85° W., 41 lks. dist.,
marked T 19 S R 11 E S 32 BT. ✓

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 56.25 chs.

East, bet. secs. 4 and 33.

Ascend abruptly over sandstone ledges.

- 1.50 Top of ledges, 75 ft. above the sec. cor., bears NW. and SE.
Over level top of solid sandstone ridge, bearing NW.
and SE.
- 9.50 Descend over rocky land, through scattering timber.
- 29.50 Begin abrupt descent over sandstone ledges, bearing NW.
and SE.
Leave timber.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 33 on N.
half, S 4 on S. half, and raise a mound of stone, 2 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor. ✓
Pits impracticable.
- 57.00 Enter bottom of Cottonwood Draw, 600 ft. deep, course SE.
Over level sandy land,
- 73.00 Leave Cottonwood Draw.
Begin abrupt ascent over broken sandstone ledges, bearing
NW. and SE.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of secs. 3-4-33 and 34, marked on brass
cap, T 19 S S 33 in NW.,
R 11 E S 34 in NE.,
R 11 E S 3 in SE. and

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

- T 20 S S 4 in SW. quadrant, and raise a mound of stone.
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable. ✓
Land, mountainous and level.
Soil, rocky and sandy 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 64.00 chs.
-
- East, bet. secs. 3 and 34.
Ascend abruptly over sandstone ledges.
- 12.00 Top of perpendicular sandstone ledges, 100 ft. high,
bearing NW. and SE.
Gradual ascent over rocky land, through scattering timber.
- 32.00 Ridge, bears N. and S.
Abrupt descent.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on
N. half, S 3 on S. half, from which
A pinon, 6 ins. diam., bears S. 51° W., 74 lks. dist.,
marked $\frac{1}{4}$ S 3 BT.
A pinon, 12 ins. diam., bears N. 7° E., 67 lks. dist.,
marked $\frac{1}{4}$ S 34 BT. ✓
- 52.50 Hollow, 200 ft. deep, course SW.
Abrupt ascent over sandstone ledges.
- 74.00 Ridge, bears NE. and SW.
Abrupt descent.
- 78.00 Begin abrupt descent over sandstone ledges, bearing NE.
and SW.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone
and earth, for cor. of secs. 2-3-34 and 35, marked on brass
cap, T 19 S S 34 in NW.,
R 11 E S 35 in NE.,
R 11 E S 2 in SE. and
T 20 S S 3 in SW. quadrant, from which

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

A pinon, 5 ins. diam., bears N. $0^{\circ}30'$ E., 36 lks. dist.,
marked T 19 S R 11 E S 35 BT.

A pinon, 4 ins. diam., bears S. 49° E., 22 lks. dist.
marked T 20 S R 11 E S 2 BT.

A pinon, 7 ins. diam., bears S. 13° W., 80 lks. dist.,
marked T 20 S R 11 E S 3 BT.

A cedar, 6 ins. diam., bears N. 66° W., 42 lks. dist.,
marked T 19 S R 11 E S 34 BT.

Note:

On account of natural obstacles it is impossible
to set this post over 10 ins. in the ground. ✓

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

November 23: At this cor. I set off $20^{\circ}16'$ S. on decl. arc,
and at 11h. 46m., a.m., l.m.t., observe the sun on the
meridian, the resulting lat. is $39^{\circ}07'$ N.

East, bet. secs. 2 and 35.

Descend abruptly over sandstone ledges.

3.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

7.00 Sandstone spur, projects S.

Abrupt descent over sandstone ledges.

26.00 Enter hollow, 500 ft. deep, course SW.

Over sandy land, in bottom of hollow.

30.00 Leave hollow.

Begin abrupt ascent along steep north slope, over broken
sandstone ledges.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on N.
half, S 2 on S. half, and raise a mound of stone, 2 ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor. ✓

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

- Pits impracticable. ✓
- 63.00 Sandstone spur, projects N.
Abrupt descent.
- 72.00 Hollow, 200 ft. deep, course N.
Abrupt ascent along steep north slope, through scattering timber.
- 80.00 On spur, projects N.
Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1-2-35 and 36, marked on brass cap, T 19 S S 35 in NW.,
R 11 E S 36 in NE.,
R 11 E S 1 in SE. and
T 20 S S 2 in SW. quadrant, from which
A pinon, 15 ins. diam., bears N. 15° E., 156 lks. dist. marked T 19 S R 11 E S 36 BT.
A pinon, 5 ins. diam., bears S. 74° E., 44 lks. dist., marked T 20 S R 11 E S 1 BT.
A cedar, 6 ins. diam., bears S. 53° W., 118 lks. dist., marked T 20 S R 11 E S 2 BT.
A pinon, 5 ins. diam., bears N. 82° W., 50 lks. dist., marked T 19 S R 11 E S 35 BT. ✓
- Land, mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 80.00 chs.
-
- East, bet. secs. 1 and 36.
Descend over rocky and mountainous land, through scattering timber.
- 4.00 Hollow, 100 ft. deep, course NW.
Abrupt ascent.
- 17.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.
- 35.00 Sandstone spur, projects S.

SOUTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

Descend along south slope.

40.00

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 36 on N. half, S 1 on S. half, from which

A pinon, 8 ins. diam., bears N. 37° W., 26 lks. dist., marked $\frac{1}{4}$ S 36 BT.

A pinon, 4 ins. diam., bears S. 80° W., 75 lks. dist., marked $\frac{1}{4}$ S 1 BT. ✓

46.00

Hollow, 75 ft. deep, course SW.

Ascend.

77.00

Ridge, bears NW. and SE.

Descend.

80.00

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of Tps. 19 and 20 S., Rs. 11 and 12 E., marked on brass cap, T 19 S on N. half, T 20 S on S. half, R 11 E S 36 in NW.,

R 12 E S 31 in NE.,

R 12 E S 6 in SE. and

R 11 E S 1 in SW. quadrant, from which

A pinon, 6 ins. diam., bears N. 48° E., 43 lks. dist., marked T 19 S R 12 E S 31 BT.

A pinon, 8 ins. diam., bears S. 12° E., 67 lks. dist., marked T 20 S R 12 E S 6 BT.

A pinon, 9 ins. diam., bears S. 24° W., 45 lks. dist., marked T 20 S R 11 E S 1 BT.

A pinon, 5 ins. diam., bears N. 80° W., 28 lks. dist., marked T 19 S R 11 E S 36 BT. ✓

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

?
 11E 12E

From the cor. of Tps. 19 and 20 S., Rs. 10 and 11 E., I run
North, bet. secs. 31 and 36.

Descend over rocky and mountainous land, through
scattering timber.

31.00 Leave timber, bears NE. and SW.

Over solid sandstone.

39.10 On top of perpendicular sandstone ledges, bearing NE.
and SW.

Set an iron post, 3 ft. long, 1 in. dia., in mound of stone
and earth, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass
cap, T19 S W C $\frac{1}{4}$ on N. half, R 11 E S 36 on W. half, and
R 12 E S 31 on E. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Note:

On account of natural obstacles it is impossible
to set this post over 10 ins. in the ground.

Descend over the perpendicular sandstone ledge, 100 ft.
high.

40.00 Point for $\frac{1}{4}$ sec. cor. falls on face of perpendicular
ledge, cannot be set.

44.00 Foot of ledges, bearing NE. and SW.

Descend abruptly over broken sandstone ledges, through
scattering timber.

61.00 Hollow, 500 ft. deep, course SW.

Abrupt ascent over sandstone ledges.

79.00 Top of perpendicular sandstone ledges, bearing NE. and SW.
Ascend over rocky land.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of secs. 25-30-31 and 36, marked on brass
cap, T 19 S on N. half,

R 11 E S 25 in NW.,

R 12 E S 30 in NE.,

S 31 in SE. and S 36 in SW. quadrant, from which

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

A pinon, 7 ins. diam., bears N. 5° E., 33 lks. dist.,
marked T 19 S R 12 E S 30 BT.

A pinon, 8 ins. diam., bears S. 65° 30' E., 76 lks. dist.
marked T 19 S R 12 E S 31 BT.

A pinon, 5 ins. diam., bears S. 85° 30' W., 42 lks. dist.
marked T 19 S R 11 E S 36 BT.

A pinon, 5 ins. diam., bears N. 74° W., 23 lks. dist.,
marked T 19 S R 11 E S 25 BT. ✓

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

North, bet. secs. 25 and 30.

Ascend over rocky land, through scattering timber.

12.00 Ridge, bears NE. and SW.

Descend over rolling land, through heavy timber.

30.00 Hollow, 50 ft. deep, course NE.

Gradual ascent over rolling land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 25 on W.
half, S 30 on E. half, from which.

A pinon, 10 ins. diam., bears N. 25° W., 23 lks. dist.,
marked $\frac{1}{2}$ S 25 BT.

A cedar, 12 ins. diam., bears S. 74° E., 54 lks. dist.,
marked $\frac{1}{2}$ S 30 BT. ✓

42.00 Leave timber, bears NE. and SW.

Enter sparse undergrowth.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of secs. 19-24-25 and 30, marked on brass
cap, T 19 S on N. half,

R 11 E S 24 in NW.,

R 12 E S 19 in NE.,

S 30 in SE. and S 25 in SW. quadrant, dig pits, 18x18x12 ins.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth,
4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, rocky, 3rd. rate on 42.00 chs.

balance, sandy loam, 2nd. rate.

Timber, cedar and pinon.

Undergrowth, shad scale and sage brush.

Heavily timbered land on 30.00 chs.

November 23, 1910

November 24: At 7h.47m., a.m., l.m.t., I set off $39^{\circ}09'N$. on
lat. arc, $20^{\circ}23'S$. on decl. arc, and determine a meridian
with the solar at the cor. of secs. 19-24-25 and 30.

Thence I run

North, bet. secs. 19 and 24.

Gradual ascent over rolling land, through sparse
undergrowth.

24.60 Road from Green River to Castledale and Huntington,
bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on W.
half, S 19 on E. half, from which

A lone cedar, 4 ins. diam., bears S. $46^{\circ}E$., 167 lks.
dist., marked $\frac{1}{4}$ S 19 BT.

No other trees within limits and raise a mound of stone
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

44.50 Begin ascent, over rocky and mountainous land, bearing
E. and W.

49.00 Enter scattering timber.

62.60 Rocky spur, projects SW.

Descend.

67.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

- 76.00 Rocky ridge, bears NE. and SW.
Descend.
- 79.00 Head of hollow, course SW.
Abrupt ascent.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 13-18-19 and 24, marked on brass cap, T 19 S on N. half,
R 11 E S 13 in NW.,
R 12 E S 18 in NE.,
S 19 in SE. and S 24 in SW. quadrant, from which
A pinon, 5 ins. diam., bears N. 26° E., 28 lks. dist.,
marked T 19 S R 12 E S 18 BT.
A pinon, 6 ins. diam., bears S. 61° 30' E., 62 lks. dist.,
marked T 19 S R 12 E S 19 BT.
A pinon, 4 ins. diam., bears S. 29° 30' W., 83 lks. dist.,
marked T 19 S R 11 E S 24 BT.
A pinon, 5 ins. diam., bears N. 43° W., 78 lks. dist.,
marked T 19 S R 11 E S 13 BT. ✓
- Land, rolling and mountainous.
Soil, sandy loam, 2nd. rate on 44.50 chs.
balance, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Undergrowth, shad scale and sage brush.
Mountainous land on 35.50 chs.
-
- North, bet. secs. 13 and 18.
Ascend abruptly over broken ledges and conglomerate boulders, through scattering timber.
- 17.50 Begin abrupt ascent over nearly perpendicular sandstone ledges, bearing E. and W.
Leave timber.
- 29.75 Top of perpendicular sandstone ledges, 75 ft. high, bearing E. and W.
Ascend abruptly over huge conglomerate boulders.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS
40.00

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on W. half, S 18 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

46.00

South rim of the Cedar Mountain, 1200 ft. above the cor. of secs. 13-18-19 and 24, bears E. and W.

Leave rocky land.

Enter heavy timber, bears E. and W.

Gradual descent over rolling land.

71.00

Begin abrupt descent along steep, east slope over huge conglomerate boulders.

80.00

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 7-12-13 and 18, marked on brass cap, T 19 S on N. half,

R 11 E S 12 in NW.,

R 12 E S 7 in NE.,

S 18 in SE. and S 13 in SW. quadrant, from which

A cedar, 15 ins. diam., bears N. 6° E., 22 lks. dist. marked T 19 S R 12 E S 7 BT.

A pinon, 12 ins. diam., bears S. 26° 30' E., 28 lks. dist., marked T 19 S R 12 E S 18 BT.

A pinon, 10 ins. diam., bears S. 29° W., 57 lks. dist., marked T 19 S R 11 E S 13 BT.

A pinon, 9 ins. diam., bears N. 56° W., 14 lks. dist., marked T 19 S R 11 E S 12 BT. ✓

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate on 25.00 chs.

balance, thin layer of soil over solid ledges, 3rd. rate.

Timber, cedar and pinon.

Mountainous land or heavily timbered on 80.00 chs.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

North, bet. secs. 7 and 12.

Descend abruptly over rocky and mountainous land, along steep, east slope covered with huge boulders, through heavy timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 12 on W. half, S 7 on E. half, from which

A cedar, 24 ins. diam., bears N. 62° E., 77 lks. dist., marked $\frac{1}{4}$ S 7 BT.

A cedar, 18 ins. diam., bears N. 82° W., 16 lks. dist., marked $\frac{1}{4}$ S 12 BT.

54.00 Leave rocky land and timber, bears NW. and SE.

Begin gradual descent over sandy land, in the bottom of Huff Hollow, 200 ft. deep, course NW.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1-6-7 and 12, marked on brass cap, T 19 S on N. half,

R 11 E S 1 in NW.,

R 12 E S 6 in NE.,

S 7 in SE. and S 12 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate on 54.00 chs.

balance, sandy, 2nd. rate.

Timber, cedar and pinon.

Mountainous land on 54.00 chs.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

North, bet . secs.1 and 6.

Descend over rolling sandy land, in bottom of Huff
Hollow, through sparse undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 1 on W.
half, S 6 on E. half, dig pits, 18x18x12 ins., N. and S. of
post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, W. of cor.

41.50 Wash, 50 lks. wide, 5 ft. deep, course NW.

50.00 Wash, 50 lks. wide, 6 ft. deep, course NW.

Begin gradual ascent.

55.00 Begin abrupt ascent along steep, west slope, over huge
conglomerate boulders, through scattering timber.

84.84 A distance equal to the west bdy. of the Tp.

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the
ground, for cor. of Tps. 18 and 19 S., Rs. 11 and 12 E.,
marked on brass cap, T 18 S on N. half, T 19 S on S. half,
R 11 E S 36 in NW.,

R 12 E S 31 in NE.,

R 12 E S 6 in SE. and

R 11 E S 1 in SW. quadrant, from which

A cedar, 20 ins. diam., bears N. 8° E., 28 lks. dist.,
marked T 18 S R 12 E S 31 BT.

A cedar, 18 ins. diam., bears S. 8° E., 27 lks. dist.,
marked T 19 S R 12 E., S 6 BT.

A cedar, 8 ins. diam., bears S. 30° W., 33 lks. dist.
marked T 19 S R 11 E S 1 BT.

A cedar, 24 ins. diam., bears N. 74° W., 36 lks. dist.,
marked T 18 S R 11 E S 36 BT.

Land, rolling and mountainous.

Soil, sandy, 2nd. rate on 55.00 chs.

balance, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

EAST BOUNDARY OF T.19 S., R.11 E.

CHAINS

Undergrowth, sage brush.

Mountainous land on 29.84 chs.

November 24: At this cor. I set off $20^{\circ}28'S$ on decl. arc, and at 11h.47m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}12'N$.

NORTH BOUNDARY OF T.19 S., R.11 E.

From the cor. of Tps. 18 and 19 S., Rs. 11 and 12 E., I run West, on a random line along the N. bdy. of Tp. 19 S., R. 11 E., setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs., and at 478.70 chs., intersect W. bdy. of Tp., 60 lks. S. of the cor. of Tps. 18 and 19 S., Rs. 10 and 11 E. heretofore described.

The falling answers to a correction of $0^{\circ}04'$, or 19 lks. N. per mile, counting from the NE. cor. of the Tp.

November 24, 1910

November 25: At 7h.47m., a.m., l.m.t., I set off $39^{\circ}12'N$ on lat. arc, $20^{\circ}35'S$ on decl. arc, and determine a meridian with the solar at the cor. of Tps. 18 and 19 S., Rs. 10 and 11 E., thence I run

$S.89^{\circ}56'E$, on a true line, bet. secs. 6 and 31.

Abrupt ascent over broken conglomerate ledges, through scattering timber.

0.75 South rim of the Cedar Mountain, bears NW. and SE.

Enter heavy timber, bears NW. and SE.

Over level rocky land.

9.50 South rim of Cedar Mountain, bears NE. and SW.

Leave heavy timber, bears NE. and SW.

Descend abruptly along steep, south slope, over broken ledges, through scattering timber.

30.50 Hollow, 300 ft. below rim, course S.

NORTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

Abrupt ascent.

35.00 Rocky spur, projects S.

Abrupt descent.

Leave timber.

38.70 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 31 on N. half, S 6 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

40.00 Hollow, 200 ft. deep, course S.

Abrupt ascent along steep, south slope.

48.00 Sandstone spur, projects S.

Abrupt descent along steep, south slope.

54.00 Hollow, 300 ft. deep, course S.

Abrupt ascent along steep, south slope, over huge conglomerate boulders, through scattering timber.

78.70 Set an iron post, 3 ft. long, 3 ins. dia., in mound of stone and earth, for cor. of secs. 5-6-31 and 32, marked on brass cap, T 18 S S 31 in NW.,

R 11 E S 32 in NE.,

R 11 E S 5 in SE. and

T 19 S S 6 in SW. quadrant, from which

A pinon, 7 ins. diam., bears N. 41° E., 10 lks. dist., marked T 18 S R 11 E S 32 BT.

A pinon, 6 ins. diam., bears S. 50° E., 72 lks. dist., marked T 19 S R 11 E S 5 BT.

A pinon, 15 ins. diam., bears S. 82° W., 13 lks. dist., marked T 19 S R 11 E S 6 BT.

No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Note:

On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

NORTH BOUNDARY OF T.19 S., R.11 E.

CHAINS	
	<p>Land, mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 78.70 chs.</p>
	<p>_____</p> <p>S. 89° 56' E., bet. secs. 5 and 32.</p>
	<p>Ascend abruptly over rocky and mountainous land, along steep, south slope covered with huge conglomerate boulders and through scattering timber.</p>
10.50	<p>South rim of Cedar Mountain, bears NW. and SE. Leave rocky land and boulders. Ascend over rolling land, through heavy timber.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on N. half, S 5 on S. half, from which</p> <p style="padding-left: 40px;">A pinon, 12 ins. diam., bears N. 69° W., 29 lks. dist., marked $\frac{1}{4}$ S 32 BT.</p> <p style="padding-left: 40px;">A pinon, 7 ins. diam., bears S. 4° W., 44 lks. dist., marked $\frac{1}{4}$ S 5 BT.</p>
42.00	<p>Ridge, bears N. and S. Descend over rocky land.</p>
59.80	<p>Hollow, 75 ft. deep, course NW. Ascend over rolling land.</p>
72.00	<p>Leave heavy timber, bears NE. and SW. Enter scattering timber.</p>
80.00	<p>Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-32 and 33, marked on brass cap, T 18 S S 32 in NW., R 11 E S 33 in NE., R 11 E S 4 in SE. and T 19 S S 5 in SW. quadrant, from which</p> <p style="padding-left: 40px;">A cedar, 12 ins. diam., bears N. 88° E., 100 lks. dist., marked T 18 S R 11 E S 33 BT.</p> <p style="padding-left: 40px;">A pinon, 7 ins. diam., bears S. 16° E., 79 lks. dist.,</p>

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NORTH BOUNDARY OF T.19 S.,R.11 E.

CHAINS

marked T 19 S R 11 E S 4 BT.

A cedar, 8 ins.diam., bears S.22°W., 30 lks.dist.,

marked T 19 S R 11 E S 5 BT.

A cedar, 7 ins.diam., bears N.66°W., 8 lks.dist.,

marked T 18 S R 11 E S 32 BT.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or heavily timbered on 72.00 chs.

S.89°56'E., bet: secs. 4 and 33.

Gradual ascent over rolling land, through heavy timber.

5.50 Leave timber, bears NW. and SE.

10.00 Enter heavy timber, bears N. and S.

13.00 Begin gradual descent over rolling land.

16.00 Leave timber, bears N. and S.

24.00 Enter heavy timber, bears N. and S.

36.00 Hollow, 25 ft. deep, course NW.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 33 on N. half, S 4 on S. half, from which

A pinon, 18 ins.diam., bears S.18°W., 77 lks.dist., marked 1/4 S 4 BT.

A pinon, 8 ins.diam., bears N.36°W., 50 lks.dist., marked 1/4 S 33 BT.

58.50 Begin gradual descent.

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 3-4-33 and 34, marked on brass cap, T 18 S S 33 in NW.,

R 11 E S 34 in NE.,

R 11 E S 3 in SE., and

T 19 S S 4 in SW. quadrant, from which

NORTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

A pinon, 18 ins. diam., bears N. 37° E., 28 lks. dist.,
marked T 18 S R 11 E S 34 BT.

A pinon, 10 ins. diam., bears S. 47° E., 36 lks. dist.,
marked T 19 S R 11 E S 3 BT.

A pinon, 13 ins. diam., bears S. 53° W., 35 lks. dist.,
marked T 19 S R 11 E S 4 BT.

A pinon, 8 ins. diam., bears N. 70° W., 82 lks. dist.,
marked T 18 S R 11 E S 33 BT.

Land, rolling.

Soil, rocky loam, 3rd. rate.

Timber, cedar and pinon.

Heavily timbered land on 67.50 chs.

November 25: At this cor. I set off 20° 41' S., on decl. arc
and at 11h. 47m., a.m., l.m.t., observe the sun on the
meridian, the resulting lat. is 39° 12' N.

S. 89° 56' E., bet. secs. 3 and 34.

Descend over rolling land, through heavy timber.

32.00 Wood road, bears N. and S.

39.60 Hollow, 30 ft. deep, course N.

Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on N.
half, S 3 on S. half, from which

A pinon, 6 ins. diam., bears S. 84° E., 56 lks. dist.,
marked $\frac{1}{4}$ S 3 BT.

A pinon, 8 ins. diam., bears North, 43 lks. dist.,
marked $\frac{1}{4}$ S 34 BT.

41.00 Spur, projects N.

Descend.

45.50 Hollow, 30 ft. deep, course NE.

Ascend.

47.00 Spur, projects NE.

Descend.

NORTH BOUNDARY OF T.19 S., R.11 E.

CHAINS

- 55.00 Begin abrupt descent over conglomerate ledges, bearing NE. and SW.
- 62.00 Leave rocky land and timber, bears NE. and SW.
Over level land in bottom of hollow, 100 ft. deep, course NE.
- 75.00 Leave hollow.
Begin abrupt ascent over broken ledges, through heavy timber, bearing NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-34 and 35, marked on brass cap, T 18 S S 34 in NW.,
R 11 E S 35 in NE.,
R 11 E S 2 in SE. and
T 19 S S 3 in SW. quadrant, from which
A cedar, 7 ins. diam., bears N. 77° E., 24 lks. dist., marked T 18 S R 11 E S 35 BT.
A cedar, 15 ins. diam., bears S. 15° E., 30 lks. dist., marked T 19 S R 11 E S 2 BT.
A pinon, 30 ins. diam., bears S. 40° W., 31 lks. dist., marked T 19 S R 11 E S 3 BT.
A pinon, 15 ins. diam., bears N. 78° W., 48 lks. dist., marked T 18 S R 11 E S 34 BT.
- Land, rolling and mountainous.
Soil, rocky, 3rd. and 4th. rate on 67.00 chs.
balance, sandy, 3rd. rate.
Timber, cedar and pinon.
Mountainous land or heavily timbered on 67.00 chs.
-
- S. 89° 56' E., bet. secs. 2 and 35.
- Ascend abruptly over broken ledges, through heavy timber.
- 4.00 Top of abrupt ascent, bears NE. and SW.
Over level rocky land.
- 10.25. Begin abrupt descent over broken ledges, bearing N. and S.

NORTH BOUNDARY OF T.19 S., R.11 E.

CHAINS	
21.00	Leave rocky land and timber, bears NE. and SW. Over level sandy land in bottom of wide hollow, 100 ft. deep, course NE.
29.00	Wash, 100 lks. wide, 10 ft. deep, course NE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on N. half, S 2 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
46.00	Wash, 50 lks. wide, 10 ft. deep, course N.
50.50	Leave hollow, begin ascent over rocky land, through scattering timber.
55.00	Rocky spur, projects N. Descend.
58.00	Leave rocky land and timber, bears NE. and SW. Over level sandy land.
66.70	Wash, 75 lks. wide, 15 ft. deep, course NW.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1-2-35 and 36, marked on brass cap, T 18 S S 35 in NW., R 11 E S 36 in NE., R 11 E S 1 in SE. and T 19 S S 2 in SW. quadrant, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, mountainous and level. Soil, rocky, 3rd. and 4th. rate on 28.50 chs. balance, sandy, 3rd. rate. Timber, cedar and pinon. Mountainous land or heavily timbered on 28.50 chs.

NORTH BOUNDARY OF T.19 S.,R.11 E.

CHAINS

S.89°56'E., bet.secs.1 and 36.

Over level sandy land.

5.00 Ascend abruptly over broken ledges and huge boulders through heavy timber.

23.75 Squaw Spring ,bears S.,1.00 ch.dist.

24.00 Top of perpendicular ledge,50 ft.high, bears N.and S. Over level land.

28.00 Wood road,bears NE.and SW.

32.00 Begin abrupt descent over broken ledges,bearing N.and S.

40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for 1/4 sec.cor.,marked on brass cap,1/4 S 36 on N. half,S 1 on S.half,from which

A pinon,6 ins.diam.,bears S.29°E.,38 lks.dist., marked 1/4 S 1 BT.

A cedar,20 ins.diam.,bears N.23°W.,47 lks.dist., marked 1/4 S 36 BT.

50.25 Leave rocky land and timber,bears N.and S.

Enter Huff Hollow 200 ft.deep,course N.

68.25 Wash,100 lks.wide,8 ft.deep,course N.

70.50 Leave hollow,

Begin abrupt ascent over rocky and mountainous land, through heavy timber.

80.00 The cor.of Tps.18 and 19 S.,R.11 and 12 E.

Land,mountainous and rolling.

Soil,rocky, on.59.75:chs.

balance,sandy, 3rd.rate.

Timber,cedar and pinon.

Mountainous land or heavily timbered land on 59.75 chs.

November 25, 1910

No trace could be found of any cors.set on this line by A.D.Ferron in 1883.

BOUNDARIES OF T.19 S., R.11 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
N. Bdy.	S. 89° 56' E.	478.70 ✓		0.56 ✓	478.70 ✓	
E. Bdy.	South	484.84 ✓		484.84 ✓		
S. Bdy.	West	479.41 ✓				479.41 ✓
W. Bdy.	North	484.84 ✓	484.84 ✓			
Convergency					0.59 ✓	
	Totals		484.84	485.40 484.84	479.29 ✓	479.41 479.29
	Error in lat. and dep.			0.56 ✓		0.12 ✓

For General Description see Subdivisions of T.19 S., R.11 E.

James M. Geist
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the S. & E. hdys. of S. Rs. 9 & 10 E., and the S. E. & N. hdys. of T. 19 S., R. 11 E., S. L. B. & M., in the State of Utah, showing the respective capacities in which they acted:

Nathan K. Knight, Chainman.

Rodney B. Shelley, Chainman.

Jacob E. Minchey, Moundman.

..... Moundman.

Olef C. Jensen, Axman.

..... Axman.

Melvin D. Heist, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in surveying all

those parts or portions of the S. and E. hdys. of T. 19 S., Rs. 9 and 10 E., and

the S., E., and N. hdys. of T. 19 S., R. 11 E.,

..... of the Salt Lake

Base and meridian, in the state of Utah

which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey

has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Nathan K. Knight Chainman.

Rodney B. Shelley Chainman.

Jacob E. Minchey Moundman.

..... Moundman.

Olef C. Jensen Axman.

..... Axman.

Melvin D. Heist Flagman.

Subscribed and sworn to before me this 25th.

day of November, 1900



Harvey D. Heist

U. S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Reist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from THOMAS MULL, United States Surveyor General for Utah, bearing date of 3rd day of May, 1910, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the S. and E. 3/4s. of T. 19 S., R. 9 and 10 E., and the N., E. and N. 3/4s. of T. 19 S., R. 11 E.

and meridians, in the State of Utah, which are represented by the foregoing field notes, have been surveyed by me, and under my direction and I do further swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

Harvey D. Reist, United States Deputy Surveyor

Subscribed by said Harvey D. Reist, and sworn to before me this 11th day of January 1911 A.M.

Thomas Mull, U.S. Surveyor General

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APPROVAL.

for Utah.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, Jan. 11, 1911, A.M.

The foregoing field notes of the survey of 3/4s. South, East, and North 3/4s. of Township No. 19 South, Range No. 11 East of the Salt Lake Base and Meridian, Utah.

executed by Harvey D. Reist and Walter A. Staunton under his contract No. 320, dated May 3, 1910, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas Mull, United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-369

E.K.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS

of

TOWNSHIP NO. 19 SOUTH, RANGE NO. 11 EAST,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Walter A. Stumm, United States Deputy Surveyors,
their

Under ~~his~~ Contract No. 320, dated May 3, 1910

Survey commenced November 26, 1910

Survey completed December 3, 1910

60-19-66 ✓

NAMES AND DUTIES OF ASSISTANTS.

Nathan K. Knight, Chairman

Rodney B. Shelley, "

Jacob E. Minchey, Moundman

Olef C. Jensen, Axman

Melvin D. Heist, Flagman

For preliminary affidavits see book "C" T. 18 S., R. 10 E.

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Township 19 South, Range 11 East,

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56	40	27	16	23	6
55	53	39	27	16	5
52	37	26	15	26	4
51	50	36	25	14	3
49	35	23	34	13	2
31	32	33	34	35	36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____, Chainman
_____, Chainman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

_____, Moundman
_____, Moundman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

_____, Axman
_____, Axman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



I, _____, do solemnly swear that I will well and truly

perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman

Subscribed and sworn to before me this _____ }
day of _____, 19 _____ }



SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Survey commenced November 26, 1910 and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows: At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude $39^{\circ}07'N.$, longitude $110^{\circ}48'W.$, I set off $39^{\circ}07'N.$ on lat. arc, $20^{\circ}51'S.$ on decl. arc, and at 3h. 47m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

November 26, 1910

November 27: At 3h. 03m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a wooden peg, driven in the ground, 5 chs. N. of my station. At 7 a.m. I lay off the azimuth of Polaris, $1^{\circ}32'$ to the east and mark the meridian thus determined, by cutting a small groove in the stone set Nov. 26, on which the meridian falls 0.2 ins. east of the mark determined by the solar. At 7h. 48m., a.m., l.m.t., I set off $39^{\circ}07'N.$ on lat. arc, $20^{\circ}58'S.$ on decl. arc, and mark a point in the meridian determined with the solar by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'11" west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory. The magnetic bearing of the true meridian at 8h. 30m., a.m., is $N.16^{\circ}45'W.$, the angle thus determined gives the

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

mag. decl. $16^{\circ}45'$ E.

From the sec. cor. already described, I run

N. $0^{\circ}01'$ W., bet. secs. 35 and 36.

Descend abruptly over rocky and mountainous land,
through scattering timber.

3.00 Hollow, 150 ft. deep, course NW. Leave timber.

Ascend abruptly over sandstone ledges.

10.00 Sandstone spur, projects NW.

Abrupt descent.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 35 on W.
half, S 36 on E. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

43.00 Enter hollow, 500 ft. deep, course SW.

49.00 Leave hollow, begin abrupt ascent over sandstone ledges.

68.00 Top of perpendicular sandstone ledges, 100 ft. high,
bearing NE. and SW.

Ascend over rocky land, through scattering timber.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
ground, for cor. of secs. 25-26-35 and 36, marked on brass
cap, T 19 S S 26 in NW.,

R 11 E S 25 in NE.,

S 36 in SE. and S 35 in SW. quadrant, from which

A cedar, 4 ins. diam., bears N. 48° E., 51 lks. dist.,
marked T 19 S R 11 E S 25 BT.

A pinon, 5 ins. diam., bears S. 74° E., 56 lks. dist.,
marked T 19 S R 11 E S 36 BT.

A pinon, 6 ins. diam., bears S. 15° W., 35 lks. dist.,
marked T 19 S R 11 E S 35 BT.

A pinon, 5 ins. diam., bears N. 63° W., 110 lks. dist.
marked T 19 S R 11 E S 26 BT.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

Mountainous land on 80.00 chs.

East, on a random line, bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs. 25-30-31 and 36, heretofore described.

Thence I run

N. $89^{\circ}58'W.$, on a true line, bet. secs. 25 and 36.

Ascend over rocky and mountainous land, along steep, south slope, through scattering timber.

22.00 Sandstone spur, projects SW.

Leave timber.

Descend over rocky land.

40.03 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 25 on N. half, S 36 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

49.50 Descend abruptly over sandstone ledges, bearing N. and S.

62.00 Hollow, 400 ft. deep, course S.

Abrupt ascent over sandstone ledges.

72.00 Top of perpendicular sandstone ledges, bearing N. and S.
Descend along rocky south slope, through scattering timber.

80.06 The cor. of secs. 25-26-35 and 36.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.06 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	N.0°01'W., bet. secs. 25 and 26.
	Ascend over rocky and mountainous land, through scattering timber.
6.00	Sandstone spur, projects SE. Descend.
17.00	Hollow, 75 ft. deep, course SE. Abrupt ascent.
20.00	Rocky spur, projects SE. Descend.
28.00	Begin abrupt descent over broken ledges, bearing NW. and SE.
32.00	Hollow, 150 ft. deep, course SE. Abrupt ascent over broken ledges.
36.50	Top of abrupt ascent, bears NW. and SE. Ascend over rolling and rocky land.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on W. half, S 25 on E. half, from which <p style="margin-left: 40px;">A pinon, 6 ins. diam., bears S. 49° E., 65 lks. dist., marked $\frac{1}{4}$ S 25 BT.</p> <p style="margin-left: 40px;">A pinon, 5 ins. diam., bears N. 26° W., 80 lks. dist., marked $\frac{1}{4}$ S 26 BT.</p>
56.00	Ridge, bears NW. and SE. Descend over rolling land.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked on brass cap, T 19 S S 23 in NW., R 11 E S 24 in NE., S 25 in SE. and S 26 in SW. quadrant, from which <p style="margin-left: 40px;">A cedar, 10 ins. diam., bears N. 6° 30' E., 186 lks. dist., marked T 19 S R 11 E S 24 BT.</p> <p style="margin-left: 40px;">A cedar, 6 ins. diam., bears S. 64° E., 41 lks. dist., marked T 19 S R 11 E S 25 BT.</p> <p style="margin-left: 40px;">No other trees within limits, dig pits, 18x18x12 ins.,</p>

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 36.50 chs.

S. $89^{\circ}58'E.$, on a random line, bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect E. bdy. of Tp., 7 lks. S. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

S. $89^{\circ}59'W.$, on a true line,

Bet. secs. 24 and 25.

Descend over rolling and rocky land, through sparse undergrowth.

26.00 Enter scattering timber, bears N. and S.

35.00 Leave timber, bears N. and S.

39.99 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 24 on N. half, S 25 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

46.00 Enter scattering timber, bears N. and S.

Begin abrupt descent over sandstone ledges, bearing N. and S.

47.75 Hollow, 75 ft. deep, course S.

Abrupt ascent.

49.00 Top of abrupt ascent, bears N. and S.

Ascend over rolling land.

76.00 Ridge, bears N. and S.

Descend.

79.98 The cor. of secs. 23-24-25 and 26.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Land, rolling,
 Soil, rocky, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Undergrowth, shad scale and sage brush.

N.0°01'W., bet. secs. 23 and 24.

Descend over rolling land, through sparse undergrowth and scattering timber.

25.00 Leave timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on W. half, S 24 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

56.50 Road from Green River to Huntington and Castledale, bears E. and W.

Begin gradual ascent over rolling land.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked on brass cap, T 19 S S 14 in NW.,
 R 11 E S 13 in NE.,
 S 24 in SE. and S 23 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam, 2nd. rate.

Timber, cedar and pinon. Undergrowth shadscale and sagebrush.

November 27: At this cor. I set off $21^{\circ}04'S$ on decl. arc, and at 11h. 48m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}10'N$.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

N.89°59'E., on a random line, bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.

Thence I run

S.89°58'W., on a true line,

Bet. secs. 13 and 24.

Ascend along steep, south slope, over rocky and mountainous land, through scattering timber.

4.00 Rocky spur, projects S.

Abrupt descent.

8.50 Hollow, 75 ft. deep, course S.

Abrupt ascent.

12.00 Spur, projects S.

Abrupt descent.

14.80 Hollow, 50 ft. deep, course S.

Ascend.

27.00 Spur, projects S.

Descend.

31.00 Hollow, 50 ft. deep, course S.E.

Ascend.

34.00 Spur, projects SE.

Descend.

39.96 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 13 on N. half, S 24 on S. half, from which

A cedar, 5 ins. diam., bears N.71°W., 200 lks. dist., marked $\frac{1}{4}$ S 13 BT.

A cedar, 6 ins. diam., bears S.30°W., 116 lks. dist., marked $\frac{1}{4}$ S 24 BT.

44.00 Hollow, 50 ft. deep, course SW.

Leave rocky and mountainous land and timber.

Ascend over rolling land, through sparse undergrowth.

63.50 Spur, projects S.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	Descend.
67.00	Hollow, 25 ft. deep, course S. Ascend.
79.92	The cor. of secs. 13-14-23 and 24. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate on 44.00 chs. balance, sandy loam, 2nd. rate. Timber, cedar and pinon. Undergrowth, sage brush and shad scale. Mountainous land on 44.00 chs.
	----- N. 0° 01' W., bet. secs. 13 and 14.
28.00	Ascend over rolling land, through sparse undergrowth. Begin ascent over rocky and mountainous land, bearing NE. and SW.
36.50	Spur, projects SW. Abrupt descent.
39.50	Hollow, 75 ft. deep, course SW. Abrupt ascent.
40.00	On top of gypsum spur, projecting SW. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 14 on W. half, S 13 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Abrupt descent.
46.00	Hollow, 75 ft. deep, course SW. Ascend abruptly over conglomerate boulders through scattering timber.
55.00	Begin abrupt ascent over nearly perpendicular sandstone ledges, bearing NW. and SE. Leave timber.
76.00	Top of sandstone ledges, 300 ft. high, bearing NW. and SE. Begin abrupt ascent over conglomerate boulders.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked on brass cap, T 19 S S 11 in NW.,
R. 11 E S 12 in NE.,
S 13 in SE. and S 14 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Land, rolling and mountainous.
Soil, sandy loam, 2nd. rate on 28.00 chs.
balance, rocky and gypsum, 3rd. and 4th. rate.
Timber, cedar and pinon.
Undergrowth, shad scale and sage brush.
Mountainous land on 52.00 chs.
-
- 40.00 N. 89°58'E., on a random line, bet. secs. 12 and 13.
Set temp. ¼ sec. cor.
- 80.04 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.
Thence I run
S. 89°57'W., on a true line,
Bet. secs. 12 and 13.
Ascend abruptly over conglomerate boulders through scattering timber.
- 10.90 Top of abrupt ascent, bears NW. and SE.
Gradual ascent over rocky land, through heavy timber.
- 22.00 Ridge, bears N. and S.
Descend.
- 38.25 Hollow, 25 ft. deep, course NE.
Ascend.
- 40.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ¼ S 12 on N. half, S 13 on S. half, from which
A pinon, 5 ins. diam., bears S. 8°E., 46 lks. dist.,
marked ¼ S 13 BT.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	A pinon, 7 ins. diam., bears N. 54° W., 5 lks. dist., marked $\frac{1}{4}$ S 12 BT.
50.00	Wood road, bears NW. and SE.
69.00	South rim of Cedar Mountain, bears NW. and SE. Leave timber, bears NW. and SE. Descend abruptly over huge conglomerate boulders, along steep, south slope.
80.04	The cor. of secs. 11-12-13 and 14. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land or heavily timbered on 80.04 chs.
	N. 0° 01' W., bet. secs. 11 and 12.
12.20	Ascend abruptly over huge conglomerate boulders. South rim of Cedar Mountain, 1312 ft. above the cor. of secs. 13-14-23 and 24, bears NW. and SE. Enter heavy timber, bears NW. and SE. Descend over rolling and rocky land.
30.00	Leave timber, bears E. and W.
34.20	Wood road, bears NW. and SE.
36.37	Wood road, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on W. half, S 12 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
49.00	Enter heavy timber, bears E. and W.
62.00	Leave timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked on brass cap T 19 S S 2 in NW., R 11 E S 1 in NE., S 12 in SE. and S 11 in SW. quadrant, from which

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

A cedar, 8 ins. diam., bears S. 14° E., 206 lks. dist.
marked T 19 S R 11 E S 12 BT.

A cedar, 12 ins. diam., bears S. 17° W., 106 lks. dist.,
marked T 19 S R 11 E S 11 BT.

A cedar, 5 ins. diam., bears N. 11° 30' W., 37 lks.
dist., marked T 19 S R 11 E S 2 BT.

No other trees within limits, dig pits, 18x18x12 ins.,
in each sec., 5½ ft. dist., and raise a mound of earth, 4
ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or heavily timbered on 67.80 chs.

N. 89° 57' E., on a random line, bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs.
1-6-7 and 12, heretofore described.

Thence I run

S. 89° 59' W., on a true line,

Bet. secs. 1 and 12.

In bottom of Huff Hollow, course NW., over rolling land,
through sparse undergrowth.

6.00 Leave hollow.

Begin abrupt ascent over huge conglomerate boulders,
through heavy timber, bearing NW. and SE.

29.00 Top of abrupt ascent, bears NW. and SE.

Leave boulders, begin descent.

35.00 Hollow, 50 ft. deep, course N.

Ascend.

40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for ¼ sec. cor., marked on brass cap, ¼ S 1 on N.
half, S 12 on S. half, from which

A cedar, 10 ins. diam., bears N. 23° W., 21 lks. dist.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 84.86 The cor. of secs. 1-2-11 and 12.
 Land, mountainous, level and rolling.
 Soil, sandy, 2nd. rate on 5.50 chs.,
 balance, rocky, 3rd. and 4th. rate.
 Timber, cedar and pinon.
 Mountainous land or heavily timbered on 70.36 chs.
 November 27, 1910
-
- November 28: At 7h. 48m., a.m., l.m.t., I set off $39^{\circ}07'N$.
 on lat. arc, $21^{\circ}09'S$. on decl. arc, and determine a meridian
 with the solar at the cor. of secs. 2-3-34 and 35,
 heretofore described, on S. bdy. of Tp.
 Thence I run
 $N.0^{\circ}01'W.$, bet. secs. 34 and 35.
 Ascend abruptly over sandstone ledges, through scattering
 timber.
- 3.00 Top of ledges, bearing NE. and SW.
 Ascend.
 Enter heavy timber, bears NE. and SW.
- 8.00 Ridge, bears NE. and SW.
 Descend.
- 12.00 Hollow, 50 ft. deep, course SW.
 Ascend.
- 18.00 Ridge, bears E. and W.
 Descend over rolling land.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 34 on W.
 half, S 35 on E. half, from which
 A pinon, 10 ins. diam., bears $S.33^{\circ}E.$, 55 lks. dist.
 marked $\frac{1}{4}$ S 35 BT.
 A cedar, 7 ins. diam., bears $N.65^{\circ}W.$, 64 lks. dist.,
 marked $\frac{1}{4}$ S 34 BT.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the
 ground, for cor. of secs. 26-27-34 and 35, marked on brass

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	cap, T 19 S S 27 in NW., R 11 E S 26 in NE., S 35 in SE. and S 34 in SW. quadrant, from which A cedar, 6 ins. diam., bears N. 38° E., 41 lks. dist., marked T 19 S R 11 E S 26 BT. A pinon, 5 ins. diam., bears S. 49° E., 121 lks. dist., marked T 19 S R 11 E S 35 BT. A cedar, 4 ins. diam., bears S. 31° W., 48 lks. dist., marked T 19 S R 11 E S 34 BT. A pinon, 5 ins. diam., bears N. 49° W., 40 lks. dist., marked T 19 S R 11 E S 27 BT. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land or heavily timbered on 80.00 chs.
	—————
	East on a random line, bet. secs. 26 and 35.
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.06	Intersect N. and S. line, 9 lks. S. of the cor. of secs. 25-26-35 and 36. Thence I run S. 89° 56' W., on a true line, Bet. secs. 26 and 35. Ascend abruptly over sandstone ledges, along steep, south slope, through scattering timber.
6.00	Top of sandstone ledges, bearing NE. and SW. Ascend.
12.50	Ridge, bears NE. and SW. Descend over rolling land.
40.03	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 26 on N. half, S 35 on S. half, from which A cedar, 12 ins. diam., bears S. 58° W., 137 lks. dist. marked $\frac{1}{4}$ S 35 BT.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

A cedar, 10 ins. diam., bears N. 27° E., 272 lks. dist., marked $\frac{1}{4}$ S 26 BT.

42.00 Enter heavy timber, bears NE. and SW.

80.06 The cor. of secs. 26-27-34 and 35.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate

Timber, cedar and pinon.

Mountainous land or heavily timbered on 44.06 chs.

N. 0° 01' W., bet. secs. 26 and 27.

Descend over rolling and rocky land, through heavy timber.

26.00 Leave heavy timber, bears E. and W.

Enter scattering timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 27 on W.

S 26 on E. half, from which

A cedar, 7 ins. diam., bears N. 88° E., 89 lks. dist., marked $\frac{1}{4}$ S 26 BT.

A cedar, 4 ins. diam., bears N. 69° W., 45 lks. dist., marked $\frac{1}{4}$ S 27 BT.

44.00 Leave timber, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked on brass cap, T 19 S S 22 in NW.,

R 11 E S 23 in NE.,

S 26 in SE. and S 27 in SW. quadrant, dig pits, 18x18x12 ins. in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, rocky, 3rd. rate on 44.00 chs.

balance, sandy loam, 2nd. rate.

Timber, cedar and pinon.

Heavily timbered land on 26.00 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- N.29°56'E., on a random line, bet. secs. 23 and 26.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 20.04 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 23-24-25 and 26.
- Thence I run
- S.89°57'W., on a true line,
Bet. secs. 23 and 26.
- Descend over rolling land, through sparse undergrowth.
- 40.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 23 on N. half, S 26 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 45.00 Enter scattering timber.
- 42.00 Leave timber.
- 20.04 The cor. of secs. 22-23-26 and 27.
- Land, rolling.
- Soil, sandy loam, 2nd. rate.
- Timber, cedar and pinon.
- Undergrowth, shad scale and sage brush.
-
- N.0°01'W., bet. secs. 22 and 23.
- Descend over rolling land, through sparse undergrowth.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on W. half, S 23 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Pits impracticable.
- 40.00 Hollow, 50 ft. deep, course W.
- Ascend over rolling land.
- 66.66 Road from Green River to Castledale bears NW. and SE.
- 20.00 Set an iron post, 3 ft. long, 2 in. dia., 24 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked on brass cap, T.19 S S 15 in NW.,

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

R 11 E S 14 in NE.,
 S 23 in SE. and S 22 in SW. quadrant, dig pits, 18x18x12 ins.
 in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth,
 4 ft. base, 2 ft. high, W. of cor.
 Land, rolling.
 Soil, sandy loam, 2nd. rate.
 No timber.
 Undergrowth, shad scale and sage brush.

N. $89^{\circ}57'E.$, on a random line, bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, 5 lks. N. of the cor. of secs.
 13-14-23 and 24.

Thence I run

S. $89^{\circ}59'W.$, on a trueline,

Bet. secs. 14 and 23.

Gradual ascent over rolling land, through sparse under-
 growth.

40.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 14 on N.
 half, S 23 on S. half, dig pits, 18x18x12 ins., E. and W. of
 post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, N. of cor.

67.53 Road from Green River to Huntington, bears NW. and SE.

80.02 The cor. of secs. 14-15-22 and 23.

Land, rolling.

Soil, sandy loam, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

November 28: At this cor. I set off $21^{\circ}14'S.$ on decl. arc,
 and at 11h. 48m., a.m., l.m.t., observe the sun on the
 meridian, the resulting lat. is $39^{\circ}10'N.$

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	N.0°01'W., bet. secs. 14 and 15.
	Ascend over rolling land, through sparse undergrowth.
7.36	Road from Green River to Huntington, bears NW. and SE.
12.00	Enter scattering timber, bears E. and W.
22.55	Ridge, bears E. and W.
	Descend over rocky land.
33.00	Hollow, 50 ft. deep, course W.
	Ascend.
35.50	Spur, projects W.
	Descend.
38.10	Hollow, 50 ft. deep, course SW.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on W. half, S 14 on E. half, from which
	A cedar, 6 ins. diam., bears N. 73° E., 43 lks. dist., marked $\frac{1}{4}$ S 14 BT.
	A cedar, 8 ins. diam., bears S. 81° W., 37 lks. dist., marked $\frac{1}{4}$ S 15 BT.
45.00	Spur, projects SW.
	Descend.
47.50	Hollow, 50 ft. deep, course SW.
	Ascend abruptly over broken gypsum land.
53.00	Spur, projects SW. SW.
	Descend.
58.00	Hollow, 75 ft. deep, course SW.
	Abrupt ascent over broken land.
76.00	Ridge, bears NE. and SW.
	Descend.
79.00	Hollow, 50 ft. deep, course SW.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 10-11-14 and 15, marked on brass cap, T 19 S S 10 in NW.,

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

R 11 E S 11 in NE.,

S 14 in SE. and S 15 in SW. quadrant, from which

A pinon, 8 ins. diam., bears N. 29° E., 55 lks. dist., marked T 19 S R 11 E S 11 BT.

A cedar, 12 ins. diam., bears S. 32° E., 57 lks. dist., marked T 19 S R 11 E S 14 BT.

A pinon, 5 ins. diam., bears S. 31° W., 39 lks. dist., marked T 19 S R 11 E S 15 BT.

A pinon, 8 ins. diam., bears N. 43° W., 42 lks. dist., marked T 19 S R 11 E S 10 BT.

Note:

On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

Land, rolling and mountainous.

Soil, sandy loam, 2nd. rate on 22.55 chs.

balance, rocky and gypsum, 3rd. and 4th. rate.

Timber, cedar and pinon.

Undergrowth, shad scale and sage brush.

Mountainous land on 57.45 chs.

N. 89° 59' E., on a random line, bet. secs. 11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 11-12-13 and 14.

Thence I run

S. 89° 57' W., on a true line,

Bet. secs. 11 and 14.

Descend over rocky and mountainous land along steep, south slope.

8.00 Begin abrupt descent over nearly perpendicular sandstone ledges, bearing NW. and SE.

40.02 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 11 on N. half, S 14 on S. half, and raise a mound of stone, 2 ft. base,

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 1½ ft. high, N. of cor.
Pits impracticable.
- 43.50 Foot of sandstone ledges, 300 ft. below top, course NW. and SE.
Descend along steep, south slope, over conglomerate boulders.
- 71.50 Hollow, 50 ft. deep, course SW.
Ascend.
- 76.00 Rocky ridge, bears NE. and SW.
Descend.
- 79.25 Hollow, 50 ft. deep, course SW.
Ascend.
- 80.04 The cor. of secs. 10-11-14 and 15.
Land, mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 80.04 chs.
- N. 0° 01' W., bet. secs. 10 and 11.
- Ascend abruptly over rocky and mountainous land, through scattering timber.
- 12.00 Begin abrupt ascent over sandstone ledges, bearing E. and W.
- 33.50 Top of sandstone ledges, 500 ft. above sec. cor., bears E. and W.
Ascend abruptly over huge conglomerate boulders.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ¼ S 10 on W. half, S 11 on E. half, from which
A pinon, 6 ins. diam., bears N. 41° W., 23 lks. dist., marked ¼ S 10 BT.
No other trees within limits and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 45.20 South rim of Cedar Mountain, 1000 ft. above sec. cor., bears NW. and SE.
Enter heavy timber, bears NW. and SE.
Descend over rocky and rolling land.
- 56.30 Wood road, bears NW. and SE.
- 70.00 Begin abrupt descent over broken sandstone ledges, bearing NW. and SE.
- 74.70 Hollow, 75 ft. deep, course NW.
Abrupt ascent.
- 76.50 Top of abrupt ascent, bears NW. and SE.
Descend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked on brass cap, T 19 S S 3 in NW.,
R 11 E S 2 in NE.,
S 11 in SE. and S 10 in SW. quadrant, from which
A pinon, 8 ins. diam., bears N. 85° E., 18 lks. dist., marked T 19 S R 11 E S 2 BT.
A pinon, 6 ins. diam., bears S. 46° E., 36 lks. dist., marked T 19 S R 11 E S 11 BT.
A pinon, 5 ins. diam., bears S. 53° W., 15 lks. dist., marked T 19 S R 11 E S 10 BT.
A pinon, 9 ins. diam., bears N. 75° W., 50 lks. dist., marked T 19 S R 11 E S 3 BT.
Land, mountainous and rolling.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land or heavily timbered on 80.00 chs.
-
- N. 89° 57' E., on a random line, bet. secs. 2 and 11.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 1-2-11 and 12.
Thence I run

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	<p style="text-align: center;">✓</p> <p style="text-align: center;">S.89°55'W., on a trueline, Bet. secs. 2 and 11.</p> <p>Gradual descent over rolling land.</p>
1.00	Enter heavy timber, bears NE. and SW.
10.00	Begin abrupt descent over broken ledges, bearing NW. and SE.
19.00	Hollow, 100 ft. deep, course NW. Abrupt ascent over broken ledges.
29.30	Top of abrupt ascent, bears NW. and SE. Descend.
40.03	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 2 on N. half, S 11 on S. half, from which <p style="margin-left: 40px;">A pinon, 6 ins. diam., bears S. 54° W., 4 lks. dist., marked $\frac{1}{4}$ S 11 BT.</p> <p style="margin-left: 40px;">A pinon, 10 ins. diam., bears N. 89° W., 73 lks. dist., marked $\frac{1}{4}$ S 2 BT.</p>
59.45	Begin abrupt descent over broken ledges, bearing NW. and SE.
64.00	Hollow, 75 ft. deep, course NW. Abrupt ascent.
68.15	Top of abrupt ascent, bears NW. and SE. Descend.
80.06	The cor. of secs. 2-3-10 and 11. Land, rolling and mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land or heavily timbered on 79.06 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

N.0°01'W., on a random line, bet. secs. 2 and 3.

40.00 Set temp. 1/4 sec. cor.

84.89 Intersect N. bdy. of Tp., 7 lks. E. of the cor. of secs. 2-3-34 and 35, heretofore described.

Thence I run

S.0°04'E., on a true line,

Bet. secs. 2 and 3.

Ascend abruptly over rocky and mountainous land, along steep, east slope, through heavy timber.

10.50 Top of abrupt ascent, bears NE. and SW.

Ascend over rolling and rocky land.

44.89 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 3 on W. half, S 2 on E. half, from which

A pinon, 4 ins. diam. bears N.14°E., 31 lks. dist., marked 1/4 S 2 BT.

A pinon, 5 ins. diam., bears N.80°W., 12 lks. dist., marked 1/4 S 3 BT.

84.89 The cor. of secs. 2-3-10 and 11.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land or heavily timbered on 84.89 chs.

November 28, 1910

November 29: At 7h. 48m., a.m., l.m.t., I set off 39°07'N. on lat. arc, 21°20'S., on decl. arc, and determine a meridian with the solar at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.

Thence I run

N.0°02'W., bet. secs. 33 and 34.

Ascend abruptly over broken sandstone ledges, along steep, east slope.

10.00 Sandstone spur, projects W.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	Abrupt descent over solid sandstone ledges.
22.00	Hollow, 300 ft. deep, course W. Abrupt ascent over sandstone ledges.
29.75	Top of sandstone ledges, bearing NW. and SE. Ascend over rocky land.
32.00	Ridge, bears NW. and SE. Enter heavy timber, bears NW. and SE. Abrupt descent.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 33 on W. half, S 34 on E. half, from which A cedar, 10 ins. diam., bears N. 45° W., 44 lks. dist., marked $\frac{1}{4}$ S 33 BT. A pinon, 6 ins. diam., bears S. 31° E., 44 lks. dist., marked $\frac{1}{4}$ S 34 BT.
42.00	Hollow, 100 ft. deep, course NW. Abrupt ascent.
49.00	Rocky ridge, bears NW. and SE. Descend.
55.10	Hollow, 75 ft. deep, course NW. Ascend.
60.00	Ridge, bears NW. and SE. Descend.
72.00	Hollow, 100 ft. deep, course NW. Abrupt ascent.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked on brass cap, T 19 S S 28 in NW., R 11 E S 27 in NE., S 34 in SE. and S 33 in SW. quadrant, from which A pinon, 12 ins. diam., bears N. 61° E., 42 lks. dist., marked T 19 S R 11 E S 27 BT. A pinon, 4 ins. diam., bears S. 49° E., 72 lks. dist., marked T 19 S R 11 E S 34 BT.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

A pinon, 5 ins. diam., bears S. 42° W., 102 lks. dist marked T 19 S R 11 E S 33 BT.

A pinon, 8 ins. diam., bears N. 31° W., 125 lks. dist., marked T 19 S R 11 E S 28 BT.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

East, on a random line, bet. secs. 27 and 34.

40.00 Set temp. 1/4 sec. cor.

79.84 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 26-27-34 and 35.

Thence I run

N. 89° 55' W., on a true line,

Bet. secs. 27 and 34.

Ascend over rolling land, through heavy timber.

39.92 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 27 on N. half, S 34 on S. half, from which

A cedar, 6 ins. diam., bears N. 51° W., 173 lks. dist., marked 1/4 S 27 BT.

A cedar, 9 ins. diam., bears S. 45° W., 201 lks. dist., marked 1/4 S 34 BT.

65.00 Ridge, bears N. and SE.

Descend.

79.84 The cor. of secs. 27-28-33 and 34.

Land, rolling.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

Heavily timbered land on 79.84 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	N.0°02'W., bet. secs. 27 and 28. Ascend over rocky and mountainous land, through heavy timber.
5.00	Rocky spur, projects W. Descend.
10.50	Hollow, 100 ft. deep, bears NW. Abrupt ascent over sandstone ledges.
15.60	Top of ledges, bearing NW. and SE. Ascend.
24.00	Rocky ridge, bears NW. and SE. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 28 on W. S 27 on E. half, from which A cedar, 7 ins. diam., bears N. 28°W., 29 lks. dist., marked $\frac{1}{4}$ S 28 BT. A cedar, 7 ins. diam., bears S. 42°E., 31 lks. dist., marked $\frac{1}{4}$ S 27 BT. ✓
60.80	Hollow, 100 ft. deep, course NW. for 5.00 chs. thence SW. Abrupt ascent over broken ledges.
68.00	Ridge, bears NW. and SE. Leave ledges, descend over rocky land.
77.00	Leave timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked on brass cap, T 19 S S 21 in NW., R 11 E S 22 in NE., S 27 in SE. and S 28 in SW. quadrant, from which A cedar, 4 ins. diam., bears S. 36°E., 179 lks. dist., marked T 19 S R 11 E S 27 BT. A cedar, 6 ins. diam., bears S. 4°30'W., 249 lks. dist., marked T 19 S R 11 E S 28 BT. No other trees within limits and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89°55'E., on a random line, bet. secs. 22 and 27.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.78 Intersect N. and S. line, 3 lks. S. of the cor. of secs.
22-23-26 and 27.

Thence I run

N. 89°56'W., on a true line,

Bet. secs. 22 and 27.

Descend over rolling land, through sparse undergrowth.

39.89 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 22 on N.
half, S 27 on S. half, from which

A lone cedar, 6 ins. diam., bears N. 23°E., 213 lks.
dist., marked $\frac{1}{4}$ S 22 BT.

No other trees within limits and dig pits, 18x18x12 ins.
E. and W. of post, 3 ft. dist., and raise a mound of earth,
 $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

79.78 The cor. of secs. 21-22-27 and 28.

Land, rolling.

Soil, sandy loam, 2nd. rate.

No timber.

Undergrowth, shad scale and sage brush.

N. 0°02'W., bet. secs. 21 and 22.

Descend over rolling land, through sparse undergrowth.

1.50 Hollow, 40 ft. deep, course NW.

Ascend.

39.50 Enter scattering timber.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
40.00	<p>Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 21 on W. half, S 22 on E. half, from which</p> <p style="padding-left: 40px;">A cedar, 5 ins. diam., bears S. 17° E., 59 lks. dist., marked $\frac{1}{4}$ S 22 BT.</p> <p style="padding-left: 40px;">A cedar, 5 ins. diam., bears S. 72° W., 36 lks. dist., marked $\frac{1}{2}$ S 21 BT.</p>
41.00	<p>Ridge, bears NW. and SE.</p> <p>Descend.</p>
48.00	<p>Leave timber.</p>
68.50	<p>Hollow, 50 ft. deep, course NW.</p> <p>Ascend.</p>
72.00	<p>Ridge, bears NW. and SE.</p> <p>Descend.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked on brass cap, T 19 S S 16 in NW.,</p> <p>R 11 E S 15 in NE.,</p> <p>S 22 in SE. and S 21 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p> <p>Pits impracticable.</p> <p>Land, rolling.</p> <p>Soil, sandy and rocky loam, 2nd. and 3rd. rate.</p> <p>Timber, cedar and pinon.</p> <p>Undergrowth, shad scale and sage brush.</p>
	<p style="text-align: center;">—————</p> <p>S. 89° 56' E., on a random line, bet. secs. 15 and 22.</p>
40.00	<p>Set temp. $\frac{1}{4}$ sec. cor.</p>
79.72	<p>Intersect N. and S. line, 12 lks. S. of the cor. of secs. 14-15-22 and 23.</p> <p>Thence I run</p> <p style="padding-left: 40px;">S. 39° 59' W., on a true line,</p> <p style="padding-left: 40px;">Bet. secs. 15 and 22.</p>

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- Ascend over rolling land, through sparse undergrowth.
- 13.00 Spur, projects SW.
Descend.
- 39.86 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 15 on N. half, S 22 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
- 53.60 Road from Green River to Castledale, bears NW. and SE.
- 76.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 79.72 The cor. of secs. 15-16-21 and 22.
Land, rolling. ✓
Soil, sandy loam, 2nd. rate.
No timber.
Undergrowth, shad scale and sage brush.
November 29: At this cor. I set off $21^{\circ}25'$ S. on decl. arc, and at 11h. 48m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}10'$ N.
-
- N. $0^{\circ}02'$ W., bet. secs. 15 and 16.
- Descend over rolling land, through sparse undergrowth.
- 2.75 Hollow, 50 ft. deep, course NW.
Ascend.
- 15.09 Green River and Castledale road bears E. and W., on top of ridge, bears E. and W.
Descend over rolling land.
- 35.00 Enter scattering timber, bears E. and W.
- 38.00 Begin abrupt descent over rocky land, bears E. and W.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 16 on W. half, S 15 on E. half, from which
A cedar, 6 ins. diam., bears N. 47° W., 37 lks. dist., marked $\frac{1}{4}$ S 16 BT.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
46.00	<p>A cedar, 6 ins. diam., bears S. 63° E., 134 lks dist., marked $\frac{1}{4}$ S 15 BT.</p> <p>Hollow, 75 ft. deep, course W.</p> <p>Abrupt ascent.</p>
48.90	<p>Road from Green River to Huntington, bears E. and W. on top of ridge, bearing E. and W.</p> <p>Descend.</p>
61.00	<p>Same road, bears NE. and SW.</p>
67.00	<p>Hollow, 75 ft. deep, course SW.</p> <p>Abrupt ascent.</p>
71.15	<p>Spur, projects SW.</p> <p>Descend.</p>
72.20	<p>Same road, bears NW. and SE.</p>
75.50	<p>Hollow, 100 ft. deep, course SW.</p> <p>Abrupt ascent.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked on brass cap, T 19 S S 9 in NW.,</p> <p>R 11 E S 10 in NE.,</p> <p>S 15 in SE. and S 16 in SW. quadrant, from which</p> <p>A cedar, 5 ins. diam., bears N. 15° E., 54 lks. dist., marked T 19 S R 11 E S 10 BT.</p> <p>A cedar, 7 ins. diam., bears S. 22° 30' E., 53 lks. dist. marked T 19 S R 11 E S 15 BT.</p> <p>A cedar, 7 ins. diam., bears S. 82° W., 83 lks. dist., marked T 19 S R 11 E S 16 BT.</p> <p>A cedar, 10 ins. diam., bears N. 48° W., 87 lks. dist., marked T 19 S R 11 E S 9 BT. ✓</p>
	<p>Land, rolling and mountainous.</p> <p>Soil, sandy loam, 2nd. rate on 38.00 chs.</p> <p>balance, rocky, 3rd. and 4th. rate.</p> <p>Timber, cedar and pinon.</p> <p>Undergrowth, shad scale and sage brush.</p> <p>Mountainous land on 80.00 chs.</p>

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

N.89°59'E., on a random line, bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.88 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 10-11-14 and 15.

Thence I run

N.89°58'W., on a true line,

Bet. secs. 10 and 15.

Ascend over rocky and mountainous land along south slope, through scattering timber.

2.00 Spur, projects S.

Descend.

3.50 Hollow, 50 ft. deep, course S.

Ascend.

6.00 Spur, projects SW.

Descend over broken south slope.

27.00 Hollow, 75 ft. deep, course SW.

Ascend.

32.00 Spur, projects SW.

Descend.

34.00 Hollow, 50 ft. deep, course SW.

Ascend.

38.00 Spur, projects SW.

Descend.

39.00 Hollow, 50 ft. deep, course SW.

Ascend.

39.94 Set an iron post, 3 ft. long, 1 in. dia., in mound of stone and earth, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 10 on N. half, S 15 on S. half, from which

A cedar, 6 ins. diam., bears N. 35° E., 87 lks. dist., marked $\frac{1}{4}$ S 10 BT.

A cedar, 16 ins. diam., bears S. 57° W., 78 lks. dist., marked $\frac{1}{4}$ S 15 BT.

Note:

On account of natural obstacles it is impossible to set this post over 12 ins. in the ground.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
43.00	Spur, projects SW. Descend.
52.00	Hollow, 50 ft. deep, course SW. Ascend over broken land.
73.00	Ridge, bears NE. and SW. Abrupt descent.
76.50	Hollow, 75 ft. deep, course SW. Ascend.
78.50	Spur, projects S. Descend along south slope.
79.88	The cor. of secs. 9-10-15 and 16. Land, mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 79.88 chs.
<hr/> N.0°02'W., bet. secs. 9 and 10. Ascend over rocky and rolling land, through scattering timber.	
4.00	Spur, projects W. Descend.
15.00	Hollow, 50 ft. deep, course W. Ascend.
17.00	Spur, projects W. Descend.
18.50	Hollow, 50 ft. deep, course SW. Ascend.
23.00	Spur, projects SW. Descend.
26.00	Hollow, 50 ft. deep, course SW. Ascend over broken gypsum land.
38.80	Spur, projects SW. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 9 on W. half, S 10 on E. half, from which

A cedar, 6 ins. diam., bears N. 85° W., 55 lks. dist., marked $\frac{1}{4}$ S 9 BT.

No other trees within limits and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

41.50 Hollow, 100 ft. deep, course SW.

Abrupt ascent. Leave timber.

46.00 Begin abrupt ascent over nearly perpendicular sandstone ledges, bearing NW. and SE.

71.00 Top of sandstone ledges, 500 ft. above $\frac{1}{4}$ sec. cor., bears NW. and SE.

Ascend abruptly over huge conglomerate boulders.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked on brass cap, T 19 S S 4 in NW.,

R 11 E S 3 in NE.,

S 10 in SE. and S 9 in SW. quadrant, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, rolling and mountainous.

Soil, gypsum and rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 76.00 chs.

S. 89° 58' E., on a random line, bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.94 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 2-3-10 and 11.

Thence I run

N. 89° 56' W., on a true line,

Bet. secs. 3 and 10.

Descend over rocky land, through heavy timber.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS	
2.00	Begin abrupt descent over broken sandstone ledges, bearing NW. and SE.
5.00	Hollow, 75 ft. deep, course NW. Abrupt ascent.
8.50	Top of abrupt ascent, bears NW. and SE. Gradual ascent over rolling land.
25.00	Leave timber, bears NW. and SE.
39.97	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 3 on N. half, S 10 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
48.00	Wood road, bears NW. and SE.
55.00	Enter heavy timber, bears NW. and SE.
61.00	South rim of Cedar Mountain, bears NW. and SE. Leave timber, bears NW. and SE.
79.94	Begin abrupt descent over huge conglomerate boulders. The cor. of secs. 3-4-9 and 10. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land or heavily timbered land on 49.94 chs.
40.00	N. $0^{\circ}02'W.$, on a random line, bet. secs. 3 and 4. Set temp. $\frac{1}{4}$ sec. cor.
84.88	Intersect N. bdy. of Tp., 7 lks. E. of the cor. of secs. 3-4-33 and 34, heretofore described. Thence I run S. $0^{\circ}05'E.$, on a true line, Bet. secs. 3 and 4.
17.80	Ascend over rolling and rocky land, through heavy timber. Leave timber, bears E. and W.
39.00	Enter heavy timber, bears E. and W.
44.88	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 4 on W.
half, S 3 on E. half, from which

A pinon, 15 ins. diam., bears N. 38° E., 20 lks. dist.
marked $\frac{1}{4}$ S 3 BT.

A pinon, 5 ins. diam., bears S. 74° W., 34 lks. dist.,
marked $\frac{1}{4}$ S 4 BT.

67.40 South rim of Cedar Mountain, bears NW. and SE.
Leave timber, bears NW. and SE.
Begin abrupt descent over huge conglomerate boulders.

84.88 The cor. of secs. 3-4-9 and 10.
Land, rolling and mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land or heavily timbered on 63.64 chs.

November 29, 1910

November 30: At 7h. 49m., a.m., l.m.t., I set off $39^{\circ}07'N$.
on lat. arc, $21^{\circ}30'S$. on decl. arc, and determine a meridian
with the solar at the cor. of secs. 4-5-32 and 33, hereto-
fore described on the S. bdy. of the Tp.

Thence I run

N. $0^{\circ}03'W$., bet. secs. 32 and 33.

Ascend abruptly over sandstone ledges, bearing NW. and SE.

3.00 Top of abrupt ascent, 100 ft. above sec. cor., bears NW.
and SE.

Over level top of solid sandstone ridge, bearing NW. and
SE.

14.00 Leave ridge, begin descent over broken sandstone ledges.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 32 on W.
half, S 33 on E. half, and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable. ✓

48.00 Begin abrupt descent over sandstone ledges, bearing NW.
and SE.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
64.00	Hollow, 300 ft. deep, course E. Ascend abruptly along steep, east slope, over broken sandstone ledges.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked on brass cap, T 19 S S 29 in NW., R 11 E S 28 in NE., S 33 in SE. and S 32 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky, 3rd. and 4th. rate. No timber. Mountainous land on 80.00 chs.
	East, on a random line, bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.08	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 27-28-33 and 34. Thence I run S. 89° 57' W., on a true line, Bet. secs. 28 and 33.
	Abrupt descent along steep south slope, over sandstone ledges, through scattering timber.
13.00	Hollow, 100 ft. deep, course NW. Abrupt ascent.
21.00	Sandstone spur, projects N. Abrupt descent along steep north slope.
32.00	Bend in Hollow, 200 ft. deep, course from NE. to NW. Leave timber.
	Abrupt ascent over sandstone ledges.
40.04	Top of spur, projects NW.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 28 on N. half, S 33 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

Descend.

45.00 Begin abrupt descent over sandstone ledges, bearing NW. and SE.

46.25 Enter bottom of Cottonwood Draw, 500 ft. deep, course SE. Over level sandy land.

64.00 Leave Cottonwood Draw.

Begin abrupt ascent over broken sandstone ledges, bearing NW. and SE.

80.08 The cor. of secs. 28-29-32 and 33.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 62.33 chs.

balance, sandy, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 62.33 chs.

November 30: At this cor. I set off $21^{\circ}35'S$. on decl. arc, and at 11h. 49m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}08'N$.

N. $0^{\circ}03'W$. , bet. secs. 28 and 29.

Ascend abruptly over broken sandstone ledges, along steep, east slope.

7.00 Sandstone spur, projects E.

Abrupt descent.

30.30 Enter bottom of Cottonwood Draw, 500 ft. deep, course SE. Over level sandy land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 29 on W. half, S 28 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base,

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

1½ ft. high, W. of cor. ✓

46.00

Leave Cottonwood Draw,

Begin abrupt ascent over sandstone ledges, bearing
NW. and SE.

53.00

Top of sandstone ledges, bearing NW. and SE.

Enter scattering timber.

Descend over rocky land.

68.00

Hollow, 100 ft. deep, course SW.

Ascend.

75.00

Ridge, bears E. and W.

Descend.

80.00

Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone
and earth, for cor. of secs. 20-21-28 and 29, marked on
brass cap, T 19 S S 20 in NW.,

R 11 E S 21 in NE.,

S 28 in SE. and S 29 in SW. quadrant, from which

A cedar, 5 ins. diam., bears N. 10° E., 49 lks. dist.,
marked T 19 S R 11 E S 21 BT.

A cedar, 5 ins. diam., bears S. 11° E., 30½ lks. dist.,
marked T 19 S R 11 E S 28 BT.

A cedar, 6 ins. diam., bears S. 56° 30' W., 153 lks. dist.,
marked T 19 S R 11 E S 29 BT.

A cedar, 8 ins. diam., bears N. 17° 30' W., 200 lks.
dist., marked T 19 S R 11 E S 20 BT.

Note:

On account of natural obstacles it is impossible
to set this post over 12 ins. in the ground ✓

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 64.30 chs.

balance, sandy, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 64.30 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- N. $89^{\circ}57'E.$, on a random line, bet. secs. 21 and 28.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 21-22-27 and 28.
- Thence I run
- $S. 89^{\circ}59'W.$, on a true line,
Bet. secs. 21 and 28.
- Ascend over rolling and rocky land, through sparse undergrowth.
- 14.00 Enter scattering timber, bears NW. and SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 21 on N. half, S 28 on S. half, from which
- A cedar, 12 ins. diam., bears $S. 89^{\circ}E.$, 43 lks. dist., marked $\frac{1}{4}$ S 28 BT.
- A cedar, 7 ins. diam., bears $N. 40^{\circ}E.$, 63 lks. dist., marked $\frac{1}{4}$ S 21 BT.
- 48.00 Low ridge, bears NW. and SE.
- Descend.
- 74.00 Head of hollow, course NW.
- Ascend.
- 76.00 Spur, projects NW.
- Descend.
- 80.00 The cor. of secs. 20-21-28 and 29.
- Land, rolling.
- Soil, rocky, 3rd. rate.
- Timber, cedar and pinon.
- Undergrowth, sage brush and shad scale.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	N.0°03'W., bet. secs. 20 and 21.
	Descend over rocky land, through scattering timber.
4.50	Hollow, 40 ft. deep, course W. Ascend.
7.50	Ridge, bears E. and W. Descend over rolling land.
33.00	Hollow, 50 ft. deep, course NW. Ascend.
38.00	Spur, projects NW. Descend.
39.70	Head of hollow, course NW. Ascend.
40.00	Set an iron post, 3 ft. long, 1 in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 20 on W. half, S 21 on E. half, from which A pinon, 15 ins. diam., bears S. 28° W., 48 lks. dist., marked $\frac{1}{4}$ S 20 BT. A cedar, 7 ins. diam., bears N. 86° E., 46 lks. dist., marked $\frac{1}{4}$ S 21 BT. ✓
41.00	Top of ascent, bears NW. and SE. Gradual descent.
44.50	Begin abrupt descent over broken sandstone ledges, bearing E. and W.
48.50	Hollow, 75 ft. deep, course NW. Abrupt ascent over sandstone ledges.
51.00	Top of sandstone ledges, bearing NW. and SE. Ascend over rocky land.
55.00	Rocky spur, projects NW. Descend.
64.65	Begin abrupt descent over sandstone ledges, bearing E. and W.
69.00	Narrow gorge, 200 ft. deep, course W. Abrupt ascent over sandstone ledges.
77.00	Top of sandstone ledges, bearing E. and W.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Ascend.

80.00

On top of ridge, bears NE. and SW.

Set an iron post, 3 ft. long, 2 ins. dia, 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked on brass cap, T 19 S S 17 in NW.,

R 11 E S 16 in NE.,

S 21 in SE. and S 20 in SW. quadrant, from which

A cedar, 7 ins. diam., bears N. 51° E., 55 lks. dist., marked T 19 S R 11 E S 16 BT.

A cedar, 4 ins. diam., bears S. 10° E., 44 lks. dist., marked T 19 S R 11 E S 21 BT.

A cedar, 5 ins. diam., bears S. 26° W., 20 lks. dist., marked T 19 S R 11 E S 20 BT.

A cedar, 5 ins. diam., bears N. 5° W., 104 lks. dist., marked T 19 S R 11 E S 17 BT.

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 35.50 chs.

November 30, 1910

December 1: At 7h. 49m., a.m., l.m.t., I set off 39° 10' N. on lat. arc, 21° 40' S. on decl. arc, and determine a meridian with the solar at the cor. of secs. 16-17-20 and 21.

Thence I run

N. 89° 59' E., on a random line, bet. secs. 16 and 21.

40.00

Set temp. $\frac{1}{4}$ sec. cor.

80.02

Intersect N. and S. line, 3 lks. S. of the cor. of secs. 15-16-21 and 22.

Thence I run

S. 89° 58' W., on a true line,

Bet. secs. 16 and 21.

Ascend along north slope, over rocky land, through sparse undergrowth.

SUBDIVISIONS OF T.19-S., R.11 E.

CHAINS	
6.00	Spur, projects N. Descend.
12.75	Narrow gorge, 100 ft. deep, course SW. From this point the " Little Hole " , a tank in the solid sandstone, 75 lks. long, 10 lks. wide, 5 ft. deep, filled with rain water, bears NE., 4.00 chs. dist. This tank is in bottom of this same gorge. Abrupt ascent.
16.00	Spur, projects S. Abrupt descent.
21.00	Same gorge, 100 ft. deep, course NW. Abrupt ascent.
23.00	Sandstone spur, projects N. Abrupt descent.
26.50	Same gorge, 100 ft. deep, course SW. Abrupt ascent along steep, south slope:
39.00	Enter scattering timber.
40.01	On top of spur, projects S. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{2}$ S 16 on N. half, S 21 on S. half, from which A cedar, 5 ins. diam., bears N. 46° E., 188 lks. dist. marked $\frac{1}{4}$ S 16 BT. A cedar, 4 ins. diam., bears S. 83° E., 67 lks. dist. marked $\frac{1}{4}$ S 21 BT. Descend.
50.00	Head of hollow, course NW. Ascend.
54.00	Sandstone spur, projects NW. Abrupt descent.
58.00	Narrow gorge, 100 ft. deep, course SW. Abrupt ascent.
66.00	Spur, projects S. Descend.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

- 71.20 Begin abrupt descent over solid sandstone ledges, bearing NW. and SE.
- 74.00 Begin ascent.
- 77.00 Leave sandstone ledges, bearing NE. and SW.
Ascend.
- 80.02 The cor. of secs. 16-17-20 and 21.
Land, rolling and mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Undergrowth, shad scale and sage brush.
Mountainous land on 67.25 chs.
-
- N.0°03'W., bet. secs. 16 and 17.
Descend over rolling and rocky land, through sparse undergrowth and scattering timber.
- 4.00 Leave timber, bears E. and W.
- 37.15 Road, from Green River to Castledale, bears NW. and SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 17 on W. half, S 16 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Pits impracticable. ✓
- 42.00 A knoll, 25 ft. high, on line.
- 55.00 Begin abrupt descent bears E. and W.
Enter scattering timber.
- 61.50 Hollow, 75 ft. deep, course W.
Abrupt ascent.
- 64.00 Spur, projects W.
Descend.
- 72.60 Hollow, 75 ft. deep, course W.
Ascend.
- 76.00 Spur, projects E.
Descend. Leave timber.

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SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 20.00 Set an iron post, 3 ft. long, 2 ins. dia., in mound of stone and earth, for cor. of secs. 8-9-16 and 17, marked on brass cap, T 19 S S 8 in NW.,
R 11 E S 9 in NE.,
S 16 in SE. and S 17 in SW. quadrant, from which
- A cedar, 5 ins. diam., bears N. 89° E., 374 lks. dist., marked T 19 S R 11 E S 9 BT.
- A cedar, 6 ins. diam., bears S. 9° 30' E., 217 lks. dist. marked T 19 S R 11 E S 16 BT.
- A cedar, 5 ins. diam., bears S. 79° W., 233 lks. dist., marked T 19 S R 11 E S 17 BT.
- A cedar, 6 ins. diam., bears N. 79° W., 271½ lks. dist., marked T 19 S R 11 E S 8 BT.

Note:

On account of natural obstacles, it is impossible to set this post over 12 ins. in the ground.

Land, rolling and mountainous.

Soil, rocky, 3rd. rate.

Timber, cedar and pinon.

Undergrowth, shad scale and sage brush.

Mountainous land on 25.00 chs.

N. 89° 58' E., on a random line, bet. secs. 9 and 16.

- 40.00 Set temp. ¼ seccor.

- 79.98 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 9-10-15 and 16.

Thence I run

N. 89° 59' W., on a true line,

Bet. secs. 9 and 16.

Descend over rolling and rocky land, through scattering timber.

- 12.45 Road from Green River to Huntington, bears NW. and SE.

- 38.88 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ½ S 9 on N. half, S 16 on S. half, from which

SUBDIVISIONS OF T.19-S., R.11 E.

CHAINS

- A cedar, 4 ins. diam., bears N.10°W., 195 lks.
dist., marked $\frac{1}{4}$ S 9 BT.
- A cedar, 5 ins. diam., bears S.27°W., 48 lks.
dist., marked $\frac{1}{4}$ S 16 BT. ✓
- 44.00 Hollow, 50 ft. deep, course SW.
Ascend.
- 58.00 Ridge, bears NE. and SW.
Leave timber.
Descend over rolling land.
- 68.00 Enter scattering timber.
- 76.50 Leave timber.
- 79.98 The cor. of secs. 8-9-16 and 17.
Land, rolling.
Soil, rocky, 3rd. rate.
Timber, cedar and pinon.
-
- N.0°03'W., bet. secs. 8 and 9.
Descend over rocky land.
- 1.25 Hollow, 40 ft. deep, course SW.
Ascend.
- 4.00 Enter scattering timber.
- 5.50 Ridge, bears NE. and SW.
Descend over rolling land.
- 18.25 Hollow, 50 ft. deep, course W.
Ascend.
- 20.00 Spur, projects W.
Descend.
- 21.70 Hollow, 50 ft. deep, course SW.
Ascend.
- 30.00 Ridge, bears NE. and SW.
Leave timber.
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 8 on W.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
44.00	<p>half, S 9 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor. ✓</p> <p>Hollow, 35 ft. deep, course W.</p> <p>Ascend over rolling land.</p>
61.30	Road, from Green River to Huntington, bears NW. and SE.
62.75	<p>spur, projects SW.</p> <p>Descend.</p>
71.00	<p>Hollow, 50 ft. deep, course W.</p> <p>Ascend over gypsum.</p>
74.75	<p>Spur, projects SW.</p> <p>Descend.</p>
78.50	<p>Hollow, 50 ft. deep, course SW.</p> <p>Ascend.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked on brass cap T 19 S S 5 in NW., R 11 E S 4 in NE., S 9 in SE. and S 8 in SW. quadrant, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>Pits impracticable. ✓</p> <p>Land, rolling.</p> <p>Soil, rocky and gypsum, 3rd. rate.</p> <p>Timber, cedar and pinon.</p> <p>December 1: At this cor. I set off 21°45' S., on decl. arc, and at 11h.49m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°11' N.</p> <hr/> <p>S. 89°59' E., on a random line, bet. secs. 4 and 9.</p>
40.00	Set temp. ¼ sec. cor.
80.06	<p>Intersect N. and S. line, 7 lks. S. of the cor. of secs. 3-4-9 and 10.</p> <p>Thence I, run</p>

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

S.89°58'W., on a true line,

Bet. secs. 4 and 9.

Descend abruptly over huge conglomerate boulders.

15.00

Begin abrupt descent over sandstone ledges, bearing NW. and SE.

33.00

Foot of sandstone ledges, 400 ft. below top, bearing NW. and SE.

Descend abruptly over rocky land, through scattering timber.

38.50

Hollow, 150 ft. deep, course S.

Abrupt ascent.

40.03

Rocky spur, projects SW.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 4 on N. half, S 9 on S. half, from which

A cedar, 6 ins. diam., bears N.16°W., 18 lks. dist., marked $\frac{1}{4}$ S 4 BT.

A cedar, 5 ins. diam., bears S.65°W., 26 lks. dist., marked $\frac{1}{4}$ S 9 BT.

Descend abruptly over huge conglomerate boulders.

44.25

Hollow, 75 ft. deep, course SW.

Abrupt ascent.

49.50

Ridge, bears NE. and SW.

Abrupt descent.

59.00

Hollow, 75 ft. deep, course SW.

Abrupt ascent.

70.40

Ridge, bears NE. and SW.

Leave timber.

Descend over rolling land.

79.25

Hollow, 50 ft. deep, course SW.

Ascend.

80.06

The cor. of secs. 4-5-8 and 9.

Land, mountainous and rolling.

Soil, rocky and gypsum, 3rd. and 4th. rate.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Timber, cedar and pinon.

Mountainous land on 70.40 chs.

N.0°03'W., on a random line, bet. secs. 4 and 5.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

85.01 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 4-5-32 and 33, heretofore described.

Thence I run

✓
S.0°05'E., on a true line,

Bet. secs. 4 and 5.

Ascend over rocky and rolling land, through heavy timber.

28.00 South rim of Cedar Mountain, bears NW. and SE.

Leave timber.

Begin abrupt descent over huge conglomerate boulders.

37.50 Begin abrupt descent over nearly perpendicular sandstone ledges, bearing NW. and SE.

45.01 Point for $\frac{1}{4}$ sec. cor. falls on the steep slope of the solid sandstone and cannot be set.

51.16 Foot of sandstone ledges, bearing NW. and SE.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap T 19 S R 11 E W C $\frac{1}{4}$ on N. half, S 5 on W. half, and S 4 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Begin abrupt descent over huge conglomerate boulders.

58.00 Enter scattering timber.

74.00 Foot of abrupt descent bears NW. and SE.

Leave boulders and timber.

Descend over gypsum hills.

78.00 Head of hollow, course SW.

Ascend.

82.00 Ridge, bears NE. and SW.

Descend.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

- 85.01 The cor.of secs.4-5-8 and 9.
 Land,mountainous and rolling.
 Soil,rocky and gypsum, 3rd.and 4th.rate.
 Timber,cedar and pinon.
 Mountainous land or heavily timbered on 74.00 chs.
 December 1, 1910
-
- December 2: At 7h.49m.,a.m.,l.m.t.,I set off $39^{\circ}07'N$.
 on lat.arc, $21^{\circ}49'S$.on decl.arc,and determine a meridian
 with the solar at the cor.of secs.5-6-31 and 32, on the
 S.bdy.of the Tp. heretofore described.
 Thence I run
 $N.0^{\circ}03'W$.,bet.secs.31 and 32.
 Descend over rolling and rocky land,through scattering
 timber.
- 40.00 Set an iron post,3 ft.long,1 in.dia.,26 ins.in the
 ground for $\frac{1}{4}$ sec.cor.,marked on brass cap, $\frac{1}{4}$ S 31 on W.
 half,S 32 on E.half,from which
 A cedar,10 ins.diam.,bears $N.47^{\circ}W$.,8 lks.dist.
 marked $\frac{1}{4}$ S 31 BT.
 A cedar,7 ins.diam.,bears $N.13^{\circ}E$.,38 lks.dist.,
 marked $\frac{1}{4}$ S 32 BT.
- 46.00 Begin abrupt descent over broken sandstone ledges,
 bearing NE.and SW.
- 57.00 Hollow,150 ft.deep,course NE.
 Abrupt ascent over sandstone ledges.
- 61.00 Top of abrupt ascent,bears NE.and SW.
 Descend over rolling and rocky land.
- 75.00 Begin abrupt descent over broken sandstone ledges,
 bearing NE.and SW.
- 80.00 Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the
 ground,for cor.of secs.29-30-31 and 32,marked on brass
 cap,T 19 S S 30 in NW.,

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

R 11 E S 29 in NE.,

S 32 in SE., and S 31 in SW. quadrant, from which

A pinon, 8 ins. diam., bears N. 51° E., 3½ lks. dist.,
marked T 19 S R 11 E S 29 BT.

A pinon, 10 ins. diam., bears S. 15° E., 20 lks. dist.,
marked T 19 S R 11 E S 32 BT.

A pinon, 6 ins. diam., bears S. 38° W., 15 lks. dist.,
marked T 19 S R 11 E S 31 BT.

A pinon, 6 ins. diam., bears N. 28° W., 92 lks. dist.,
marked T 19 S R 11 E S 30 BT.

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 20.00 chs.

East, on a random line, bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line, 9 lks. N. of the cor. of secs.
28-29-32 and 33.

Thence I run

N. 89° 56' W., on a true line,

Bet. secs. 29 and 32.

Ascend abruptly over broken sandstone ledges.

6.00 Top of sandstone ledges, bearing N. and S.

Ascend over rolling and rocky land, through scattering
timber.

35.00 Rocky ridge, bears N. and S.

Leave timber.

Descend over rolling and rocky land.

40.04 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 29 on N.
half, S 32 on S. half, and raise a mound of stone, 2 ft.
base, 1½ ft. high, N. of cor.

Pits impracticable.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 59.50 Begin abrupt descent over broken sandstone ledges,
bearing NE. and SW.
- 62.50 Hollow, 100 ft. deep, course NE.
Abrupt ascent.
Enter scattering timber.
- 67.00 Sandstone spur, projects NE.
Abrupt descent.
- 80.08 The cor. of secs. 29-30-31 and 32.
Land, mountainous and rolling.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 26.58 chs.
-
- 40.00 West, on a random line, bet. secs. 30 and 31.
Set temp. $\frac{1}{4}$ sec. cor.
- 79.32 Intersect W. bdy. of Tp., 5 lks. S. of the cor. of secs.
25-30-31 and 36, heretofore described.
Thence I run

$$S. 89^{\circ} 58' E., \text{ on a true line,}$$

$$\text{Bet. secs. 30 and 31.}$$
Ascend over rolling and rocky land.
- 3.00 Enter scattering timber.
- 7.00 Spur, projects N.
Descend.
- 17.00 Hollow, 50 ft. deep, course NW.
Ascend.
- 25.00 Ridge, bears NW. and SE.
Descend.
- 32.00 Hollow, 50 ft. deep, course N.
Ascend.
- 38.00 Ridge, bears N. and S.
Descend.
- 39.32 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on N.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	<p>half, S 31 on S. half, from which</p> <p>A cedar, 5 ins. diam., bears S. 30° W., 26 lks. dist., marked $\frac{1}{4}$ S 31 BT.</p> <p>A pinon, 10 ins. diam., bears N. 75° E., 19 lks. dist., marked $\frac{1}{4}$ S 30 BT.</p>
47.50	Rocky wash, 100 lks. wide, 35 ft. deep, course N.
61.00	Rocky wash, 150 lks. wide, 50 ft. deep, course N.
69.00	Begin abrupt descent over broken sandstone ledges, bearing NE. and SW.
77.00	Hollow, 100 ft. deep, course NE. Ascend.
79.32	The cor. of secs. 29-30-31 and 32. Land, rolling and mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 10.32 chs.
	<hr/> <p>N. 0° 03' W., bet. secs. 29 and 30.</p>
	Descend over rocky and mountainous land, through scattering timber.
3.00	Hollow, 100 ft. deep, course NE. Abrupt ascent over broken ledges.
14.00	Top of abrupt ascent, bears NE. and SW. Descend over rolling and rocky land.
32.00	Leave timber.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 30 on W. half, S 29 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
46.00	Begin abrupt descent over broken sandstone ledges, bearing NE. and SW.
56.00	Hollow, 150 ft. deep, course NE. Abrupt ascent over broken ledges.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

- 68.00 Top of abrupt ascent, bears NE. and SW.
Descend over rolling and rocky land.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked on brass cap, T 19 S S 19 in NW.,
R 11 E S 20 in NE.,
S 29 in SE. and S 30 in SW. quadrant, from which
A pinon, 6 ins. diam., bears N. 58° E., 183 lks. dist., marked T 19 S R 11 E S 20 BT.
A cedar, 4 ins. diam., bears S. 33° E., 48 lks. dist. marked T 19 S R 11 E S 29 BT.
A cedar, 8 ins. diam., bears S. 59° W., 22 lks. dist. marked T 19 S R 11 E S 30 BT.
A cedar, 4 ins. diam., bears N. 51° W., 68 lks. dist. marked T 19 S R 11 E S 19 BT.
- Land, rolling and mountainous.
Soil, rocky, 3rd. and 4th. rate.
Timber, cedar and pinon.
Mountainous land on 36.00 chs.
December 2: At this cor. I set off $21^{\circ}54'S$. on decl. arc, and at 11h. 49m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}09'N$.
-
- S. $89^{\circ}56'E$., on a random line, bet. secs. 20 and 29.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 20-21-28 and 29.
Thence I run
N. $89^{\circ}58'W$., on a true line,
Bet. secs. 20 and 29.
Descend over rolling and rocky land, through scattering timber.
- 9.00 Begin abrupt descent in rocky hollow, course from NE. to W.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
18.00	Leave hollow, course NW. Begin abrupt ascent along steep, north slope over solid sandstone.
23.00	Sandstone spur, projects NW. Descend.
28.00	Hollow, 75 ft. deep, course NW. Leave timber. Abrupt ascent.
33.00	Sandstone spur, projects NW. Abrupt descent.
36.00	Hollow, 75 ft. deep, course NW. Abrupt ascent.
40.03	On spur, projects NW. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 20 on N. half, S 29 on S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. ✓ Descend abruptly over sandstone ledges.
44.00	Enter bottom of Cottonwood Draw, 400 ft. deep, course SE. Over level sandy land.
58.00	Leave Cottonwood Draw. Begin abrupt ascent over sandstone ledges, bearing N. and S.
71.00	Top of sandstone ledges, bearing NE. and SW. Gradual descent over rocky and rolling land.
80.06	The cor. of secs. 19-20-29 and 30. Land, rolling, level and mountainous. Soil, rocky, 3rd. and 4th. rate on 66.06 chs. balance, sandy, 3rd. rate. Timber, cedar and pinon. Mountainous land on 66.06 chs.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

N.0°03'W., bet. secs. 19 and 20.

Descend over rocky and rolling land, through scattering timber.

6.00 Begin abrupt descent over sandstone ledges, bearing E. and W.

12.50 Hollow, 150 ft. deep, course NE.
Abrupt ascent.

19.00 Sandstone spur, projects E.
Abrupt descent.

25.00 Hollow, 100 ft. deep, course NE.
Abrupt ascent.

29.10 Sandstone spur, projects NE.
Abrupt descent over sandstone ledges.

34.00 Enter Cottonwood Draw, 300 ft. deep, course E.
Over level sandy land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 19 on W. half, S 20 on E. half, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

48.00 Leave Cottonwood Draw.
Begin abrupt ascent over sandstone ledges, bearing NE. and SW.

49.00 Sandstone spur, projects SW.
Descend along steep, broken, west slope, over solid sandstone.

79.00 Narrow gorge, 200 ft. deep, course SW.
Scattering timber in bottom of gorge. Ascend.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked on brass cap, T 19 S S 18 in NW.,
R 11 E S 17 in NE.,
S 20 in SE. and S 19 in SW. quadrant, from which

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

A cedar, 5 ins. diam., bears N. 32° E., 19 lks. dist., marked T 19 S R 11 E S 17 BT.

A cedar, 12 ins. diam., bears S. 4° E., 85 lks. dist., marked T 19 S R 11 E S 20 BT.

A cedar, 5 ins. diam., bears S. 7° W., 45 lks. dist. marked T 19 S R 11 E S 19 BT.

No other trees within limits and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable. ✓

Land, rolling, mountainous, and level.

Soil, rocky, 3rd. and 4th. rate on 63.00 chs.

balance, sandy, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 63.00 chs.

S. 89° 58' E., on a random line, bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

79.92 Intersect N. and S. line, 9 lks. S. of the cor. of secs.

16-17-20 and 21.

Thence I run

S. 89° 58' W., on a true line,

Bet. secs. 17 and 20.

Descend over rolling and rocky land, through scattering timber.

25.70 Hollow, 75 ft. deep, course SW.

Ascend.

30.00 Spur projects SW.

Descend.

38.20 Hollow, 50 ft. deep, course SW.

Ascend.

39.96 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, ¼ S 17 on N. half, S 20 on S. half, from which

A cedar, 9 ins. diam., bears S. 5° 30' E., 269 lks. dist. marked ¼ S 20 BT.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS	
	A cedar, 10 ins. diam., bears N. 53° W., 64 lks. dist marked $\frac{1}{4}$ S 17 BT.
48.00	Spur, projects SW. Descend over rolling land.
73.00	Begin abrupt descent over solid sandstone ledges, bearing NE. and SW.
79.25	Narrow gorge, 200 ft. deep, course SW. Ascend.
79.92	The cor. of secs. 17-18-19 and 20. Land, rolling and mountainous. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon. Mountainous land on 6.92 chs.
	December 2, 1910

	December 3: At 7h. 50m., a.m., l.m.t., I set off 39° 10' N. on lat. arc, 21° 58' S. on decl. arc, and determine a meridian with the solar at the cor. of secs. 17-18-19 and 20. Thence I run N. 89° 59' W., on a random line, bet. secs. 18 and 19
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.13	Intersect W. bdy. of Tp., 12 lks. N. of the cor. of secs. 13-18-19 and 24, heretofore described. Thence I run N. 89° 56' E., on a true line, Bet. secs. 18 and 19. Ascend along steep, north slope, over sandstone ledges.
5.00	Enter scattering timber.
16.00	Sandstone spur, projects N. Abrupt descent over sandstone ledges.
31.00	Top of perpendicular sandstone ledge, 75 ft. high, bears NW. and SE. Leave timber.
31.50	Enter bottom of Cottonwood Draw, 200 ft. deep, course SE. Over level sandy land.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- 39.13 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 18 on N. half, S 19 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
- 45.00 Leave Cottonwood Draw.
Begin abrupt ascent over sandstone ledges, through scattering timber.
- 54.50 Top of sandstone ledges and abrupt ascent, bears N.W. and SE.
Leave timber.
Gradual ascent over rolling land, through sparse undergrowth.
- 74.00 Begin abrupt descent over sandstone ledges, bearing NE. and SW.
- 79.13 The cor. of secs. 17-18-19 and 20.
Land, mountainous, level and rolling.
Soil, rocky, 3rd. and 4th. rate on 65.63 chs.
balance, sandy, 3rd. rate.
Timber, cedar and pinon.
Undergrowth, shad scale and sage brush.
Mountainous land on 46.13 chs.
-
- N. $0^{\circ}03'$ W., bet. secs. 17 and 18.
Ascend abruptly over sandstone ledges, along steep, east slope.
- 8.25 Top of ledges, 200 ft. above sec. cor., bears NE. and SW.
Ascend over rocky land.
- 13.00 Rocky ridge, bears NE. and SW.
Descend over rolling land.
- 27.00 Head of hollow, course W.
Ascend.
- 29.00 Ridge, bears NW. and SE.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS	
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 18 on W. half, S 17 on E. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
45.80	Hollow, 75 ft. deep, course W. Abrupt ascent.
50.00	Spur, projects W. Abrupt descent.
58.00	Hollow, 50 ft. deep, course W. Ascend.
61.00	Spur, projects W. Abrupt descent.
65.00	Hollow, 100 ft. deep, course SW. Abrupt ascent.
69.25	Road between Green River and Castledale, bears NE. and SW.
74.00	Enter scattering timber.
80.00	Set and iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked on brass cap T 19 S S 7 in NW., R 11 E S 8 in NE., S 17 in SE. and S 18 in SW. quadrant, from which A cedar, 4 ins. diam., bears N. 8° E., 132 lks. dist., marked T 19 S R 11 E S 8 BT. A cedar, 6 ins. diam., bears S. 20° 30' E., 28 lks. dist., marked T 19 S R 11 E S 17 BT. A cedar, 10 ins. diam., bears S. 11° W., 111 lks. dist., marked T 19 S R 11 E S 18 BT. A cedar, 7 ins. diam., bears N. 14° 30' W., 52 lks. dist., marked T 19 S R 11 E S 7 BT. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate. Timber, cedar and pinon.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

Mountainous land on 43.45 chs.

N.89°58'E., on a random line, bet. secs. 8 and 17.

40.00 Set temp. 1/4 sec. cor.

79.98 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 8-9-16 and 17.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 8 and 17.

Descend over rocky land.

2.00 Hollow, 50 ft. deep, course SW.

Enter scattering timber.

Ascend.

6.00 Ridge, bears NE. and SW.

Descend.

19.25 Hollow, 50 ft. deep, course NW.

Ascend.

20.50 Spur, projects N.

Descend.

25.25 Hollow, 50 ft. deep, course N.

Ascend.

29.00 Spur, projects N.

Descend.

32.00 Hollow, 75 ft. deep, course SW.

Ascend.

39.99 Spur, projects S.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 8 on N. half, S 17 on S. half, from which

A cedar, 4 ins. diam., bears N:26°W., 88 1/2 lks. dist., marked 1/4 S 8 BT.

A cedar, 5 ins. diam., bears S.5°30'W., 132 lks. dist., marked 1/4 S 17 BT.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

Descend.

48.00 Hollow, 75 ft. deep, course NW.

Ascend.

59.00 Rocky spur, projects N.

Descend.

64.00 Road from Green River to Castledale, bears NW. and SE.

66.25 Same road, bears NE. and SW.

67.10 Hollow, 100 ft. deep, course S.

Abrupt ascent.

69.70 Rocky spur, projects S.

Descend.

75.50 Hollow, 50 ft. deep, course S.

Ascend.

79.98 The cor. of secs. 7-8-17 and 18.

Land, rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 47.98 chs.

S. 89° 56' W., on a random line, bet. secs. 7 and 18.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.01 Intersect W. bdy. of Tp., 7 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

N. 89° 59' E., on a true line,

Bet. secs. 7 and 18.

Ascend over rolling land, through sparse undergrowth.

2.75 Ridge, bears NE. and SW.

Descend.

10.75 Hollow, 50 ft. deep, course SW.

Ascend.

13.15 Road between Green River and Castledale, bears NW. and SE.

39.01 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 7 on N.

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

- half, S 18 on S. half, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
- 50.00 Junction of two ridges, from NW. and SW.
Thence along top of ridge, course E. Ascend.
- 69.00 Leave ridge, bears NE. and W.
Descend.
Enter scattering timber.
- 72.00 Head of hollow, course S.
Ascend.
- 77.00 Spur, projects S.
Descend.
- 79.01 The cor. of secs. 7-8-17 and 18.
Land, rolling.
Soil, rocky, 3rd. rate.
No timber.
Undergrowth, shad scale and sage brush.
-
- N. 0° 03' W., bet. secs. 7 and 8.
- 11.50 Ascend over rocky land, through scattering timber.
Ridge, bears NE. and SW.
Leave timber.
Descend over rolling land, through sparse undergrowth.
- 36.60 Enter level land, bears NE. and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 7 on W. half, S 8 on E. half, dig pits, 18x18x12 ins., N. and S. of post, ^{3 ft. dist.} and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- 65.15 Wash, 20 lks. wide, 5 ft. deep, course SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked on brass cap
T 19 S S 6 in NW.,

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

R 11 E S 5 in NE.,
S 8 in SE. and S 7 in SW. quadrant, dig pits, 18x18x12 ins.
in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4
ft. base, 2 ft. high, W. of cor.

Land, rolling and level.

Soil, rocky, 3rd. rate on 11.50 chs.

balance, loam, 1st. and 2nd. rate.

Timber, cedar and pinon.

Undergrowth, shad scale and sage brush.

December 3; At this cor. I set off $22^{\circ}03'S.$, on decl. arc,
and at 11h.50m., a.m., l.m.t., observe the sun on the
meridian, the resulting lat. is $39^{\circ}11'N.$

N. $89^{\circ}59'E.$, on a random line, bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs.
4-5-8 and 9.

Thence I run

S. $89^{\circ}58'W.$, on a true line,

Bet. secs. 5 and 8.

Ascend over gypsum soil and rocky land, through sparse
undergrowth.

2.25 Ridge, bears NE. and SW.

Descend over rolling land.

16.00 Enter level land, bears NE. and SW.

28.00 Wash, 10 lks. wide, 8 ft. deep, course SW.

33.00 Road between Green River and Huntington, bears NE. and
SW.

39.98 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 5 on N.
half, S 8 on S. half, dig pits, 18x18x12 ins., E. and W. of
post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base
 $1\frac{1}{2}$ ft. high, N. of cor.

SUBDIVISIONS OF T.19 S.,R.11 E.

CHAINS

- 57.00 Wash, 20 lks. wide, 6 ft. deep, course SW.
- 61.00 Wash, 15 lks. wide, 5 ft. deep, course SW.
- 79.96 The cor. of secs. 5-6-7 and 8.
Land, rolling and level.
Soil, rocky and gypsum, 3rd. rate on 16.00 chs.
balance, loam, 1st. rate.
No timber.
Undergrowth, shad scale and sage brush.
- 40.00 S. 89°59'W., on a random line, bet. secs. 6 and 7.
Set temp. 1/4 sec. cor.
- 78.89 Intersect W. bdy. of Tp., 3 lks. N. of the cor. of secs.
1-6-7 and 12, heretofore described.
Thence I run
N. 89°58'E., on a true line,
Bet. secs. 6 and 7.
Over level land, through sparse undergrowth.
- 38.89 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
ground, for 1/4 sec. cor., marked on brass cap, 1/4 S 6 on N.
half, S 7 on S. half, dig pits, 18x18x12 ins., E. and W. of
post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base
1 1/2 ft. high, N. of cor.
- 78.89 The cor. of secs. 5-6-7 and 8.
Land, level.
Soil, loam, 1st. rate.
No timber.
Undergrowth, shad scale and sage brush.
N. 0°03'W., on a random line, bet. secs. 5 and 6.
- 40.00 Set temp. 1/4 sec. cor.
- 84.92 Intersect N. bdy. of Tp., 7 lks. E. of the cor. of secs.
5-6-31 and 32, heretofore described.
Thence I run

SUBDIVISIONS OF T.19 S., R.11 E.

CHAINS

S.0°06'E., on a true line,

Bet. secs. 5 and 6.

Descend abruptly over conglomerate boulders, through scattering timber.

9.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

17.00 Rocky spur, projects SW.

Abrupt descent.

23.00 Begin abrupt descent over sandstone ledges, bearing NW. and SE.

32.00 Foot of sandstone ledges, bearing NW. and SE.

Descend abruptly over conglomerate boulders.

44.92 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S 6 on W. half, S 5 on E. half, from which

A pinon, 6 ins. diam., bears N. 54° E., 15 lks. dist., marked $\frac{1}{4}$ S 5 BT.

A pinon, 4 ins. diam., bears S. 62° E., 53 lks. dist., marked $\frac{1}{4}$ S 6 BT.

52.75 Leave rocky land and timber, bears E. and NW.

Over level land, through sparse undergrowth.

55.20 Road between Green River and Huntington, bears NW. and SE.

84.92 The cor. of secs. 5-6-7 and 8.

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate on 52.75 chs.

balance, loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, shad scale and sage brush.

Mountainous land on 52.75 chs.

December 3, 1910

Note:

No traces could be found of any of the cors.

purported to have been set by A.D. Ferron in 1883.

GENERAL DESCRIPTION OF T.19 S.,R.11 E.

This township is mountainous in the northern and north-eastern portions and the balance is rolling or broken with the exception of a portion of secs.5,6,7 and 8, which is level and is a rich loam, covered with a sparse growth of undergrowth and is capable of producing crops with irrigation.

The northern portion which lies on top of Cedar Mountain is 1400 ft.higher in elevation than the balance of the township ,this elevation is obtained in a horizontal distance of about $\frac{1}{2}$ mile,over a series of sandstone and conglomerate ledges.

The top of the mountain is generally covered with a scattering or dense growth of cedar and pinon timber, with some grass and is used as a range.

The southwestern portion of the township is badly broken by Cottonwood Draw and by the hollows draining into it,all of which have sides which are sandstone ledges and nearly perpendicular.

The soil of the land not included in the mountainous or agricultural portion is generally rocky with a gypsum subsoil, and is covered with a sparse growth of undergrowth, grasses and with a scattering growth of cedar and pinon timber.

Roads leading from Green River to Castledale and Huntington cross this township.

The only living water in this township is Squaw Spring in the NW. $\frac{1}{4}$ of sec.1, this is a spring of pure water and is used by stockmen.

A natural tank in the solid sandstone filled with rain water during the rainy months and know as the "Little Hole",is located in the SE. $\frac{1}{4}$ of sec.16.

This water is used by travellers ,being the only water between the Green and the San Rafael rivers.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of the Subdivisions

T. 18 S., R. 10 E., and Tps. 19 S., Rs. 9, 10 and 11 E., S. L. B. & M., in the state of Utah.

showing the respective capacities in which they acted:

Nathan K. Knight, Chairman.

Rodney B. Shelley, Chairman.

Jacob E. Minchey, Moundman.

Moundman.

Olef C. Jensen, Axman.

Axman.

Melvin D. Heist, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in surveying all

those parts or portions of the Subdivisions of T. 18 S., R. 10 E., and Tps. 19 S.,

Rs. 9, 10 and 11 E.,

of the Salt Lake

Base and meridian, in the state of Utah, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Nathan K. Knight, Chairman.

Rodney B. Shelley, Chairman.

Jacob E. Minchey, Moundman.

Moundman.

Olef C. Jensen, Axman.

Axman.

Melvin D. Heist, Flagman.

Subscribed and sworn to before me this 3rd.

day of December, 1900

Harvey D. Heist

U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date 3rd day of May, 1910, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisions of T. 16 S. R. 10 E., and Tps. 19 S., Rs. 9, 10 and 11 E.,

of the Salt Lake and Meridian in the state of Utah, which are represented in Books C. U. I. & A. foregoing field notes, having been surveyed by me, and under my direction; and I do further swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me this 11th day of January, 1911, 1906

Thomas Hull
U. S. Surveyor-General

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U. S. Surveyor-General

For Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, January 23, 1911

The foregoing field notes of the survey of the Subdivisional lines of Township No. 19 South, Range No. 11 East of the Salt Lake Base and Meridian, Utah,

checked by Harvey D. Heist and Walter A. Slama under contract No. 320 dated May 3, 1910, 1906, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office

United States Surveyor General